MDP 3.0 FIX Tag Library

Use the filters below to query MDP 3.0 message specification tags by Tag, Name, FIX Type, and Required.

This page lists all MDP 3.0 message types in a set order. Message types may be blank if the filter is not applicable.

Please scroll through the list of messages to see full results.

- MDP 3.0 - FIX Message Header —

Tag	Name	FIX Type	Enumeration	Req	Description
35	MsgType	Int	0=Heartbeat X= Incremental Refresh W=Snapshot d=Security Definition f=Security Status R=Request for Quote	Y	FIX Message Type.

- MDP 3.0 - Heartbeat —

Tag	Name	FIX Type	Enumeration	Req	Description
35	MsgType	Int	0=Heartbeat	Y	FIX Message Type

- MDP 3.0 - Market Data Incremental Refresh —

Tag	Name	FIX Type	Enumeration	Req	Description
60	TransactTime	UTCTimestamp		Y	Start of event processing time (UTC). UTC Timestamps are sent in number of nanoseconds since Unix epoch synced to a master clock to microsecond accuracy.
5799	MatchEventIndicator	String	ex. 00000001 – end of trade summaries, not end of event messages ex. 10000100 – end of quotes, end of event ex. 00001000 – end of statistics, not the end of event	Y	Bitmap field of eight Boolean type indicators reflecting the end of updates for a given CME Globex Event: Bit 0: (least significant bit) Last Trade Summary message for a given event Bit 1: Last electronic volume message for a given event Bit 2: Last customer order quote message for a given event Bit 3: Last statistic message for a given event Bit 4: Last implied quote message for a given event Bit 5: Message resent during recovery Bit 6: Reserved for future use Bit 7: (most significant bit) Last message for a given event
268	NoMDEntries	NumInGroup		Y	Indicates number of repeating groups and length of each repeating group in Market Data message.
279	MDUpdateAction	Char	0 = New 1 = Change 2 = Delete	Y	MD Update Action

269	MDEntry Type	Char	0 = Bid 1 = Offer E = Implied Bid F = Implied Offer 2 = Trade Summary 4 = Opening Price 6 = Settlement Price 7 = Trading Session High Price 8 = Trading Session Low Price N = Session High Bid O = Session Low Offer B = Trade Volume C = Open Interest W = Fixing Price J = Empty Book e = Electronic Volume g =Threshold Limits and Price Band Variation	Y	Market Data Entry Type. MD Entry Type **“e”** - **Electronic Volume block**. **Electronic Volume** entry provides **Cumulative Trade Volume** updated with the event.
48	SecurityID	Int		C	Unique instrument ID. The unique instrument ID value will not be reused until the next trade date following an instrument expiration or deletion.
83	RptSeq	Int		C	MD Entry sequence number per instrument update. Reset weekly.
270	MDEntry Px	Price		C	Price of the MD Entry.
271	MDEntry Size	Qty		C	Quantity of the MD Entry. • In a Book Entry– order quantity • In a Trade Entry – traded quantity • In Electronic Volume - represents cumulative traded volume of the Daily Trade session. • In an Indicative Opening - the indicative opening quantity
346	Number OfOrders	Int		C	• In Book Entry - aggregate number of orders at the given price level. • In Trade Entry - identifies the total number of non-implied orders per instrument that participated in this match event.
1023	MDPrice Level	Int		C	Aggregate book level, any number from 1 to 10.
286	OpenCloseSettlFlag	Int	0 = Daily Open Price 5 = Indicative Opening Price (IOP)		Flag describing Open Price entry.

731	SettlPrice Type	String	Examples: 00000110 – Preliminary Actual Settlement at Trading Tick 00000010 – Preliminary Actual Settlement at Clearing Tick 00000101 – Final Theoretical Settlement at Trading Tick 00000111 – Final Actual Settlement at Trading Tick 00000011 – Final Actual Settlement at Clearing Tick	C	Bitmap field of eight Boolean type indicators representing settlement price type: Bit 0: (least significant bit): 1=Final 0=Preliminary Bit 1: 1=Actual 0=Theoretical Bit 2: 1=Settlement at Trading Tick 0=Settlement at Clearing Tick Bit 3: 1=Intraday 0=Undefined Bit 4-6: Reserved for future use, set to 0 Bit 7: 0=not NULL 1=entire set is a NULL
5797	AggressorSide	Int	0 = No aggressor 1 = Buy 2 = Sell	C	Indicates which side is aggressor of the trade. If there is a zero value present, then there is no aggressor. **Note:** Trades without aggressors occur at Market Open, after a Pre-Open or after a Pause, and also when the event includes customer order participation in a trade with a CME Globex-generated implied bid or offer.
37711	MDTrade EntryID	Char		C	Common Trade ID that links each trade execution.
5796	TradingReference Date	LocalMktDate		C	Date of trade session corresponding to a statistic entry. Sent in number of days since Unix epoch.
1149	HighLimit Price	Price		C	Upper price threshold for the instrument. Orders submitted with prices above the upper limit will be rejected.
1148	LowLimit Price	Price		C	Lower price threshold for the instrument. Orders submitted with prices below the lower limit will be rejected.
1143	MaxPrice Variation	Price		C	Differential static value for price banding. In continuous trading mode: Buy orders submitted above (Last Best Price + Max Price Variation) will be rejected. Sell orders submitted bellow (Last Best Price - Max Price Variation) will be rejected. In pre-open state multiplier may be applied to base static value to expand the bands, multiplier value is not provided on market data. **Note:** Max Price Variation is not provided for option instruments with dynamic Banding Values.
1180	ApplID	Int		C	The value indicates the channel ID as defined in the XML configuration file. The Market Data Incremental Refresh (tag 35-MsgType=X) message Channel Reset data block references the channel ID to be reset.
9633	ReferenceID	uInt8		C	Reference to corresponding Price and Security ID, sequence of 268-NoMDEntries in a message.
32	LastQty	Int		C	Qty bought or sold on this last fill.
37	OrderID	Int		C	Unique ID assigned by CME Globex to identify orders.
37707	MDOrder Priority	uInt64		C	Order priority for execution on the order book. A lower value is a higher priority. Value is unique for all orders within a market segment and assigned for all orders.
37706	MDDisplayQty	Int32		C	Visible quantity of an order to the market. Orders may have additional hidden display quantity.
37705	NoOrderIDEntries			C	Repeating group of MBO book updates included in an event. Repeating group used for MBP and MBO combined updates.
37	OrderID	Int		C	Unique ID assigned by CME Globex to identify orders.

37706	MDDisplayQty	Int32		C	Visible quantity of an order to the market. Orders may have additional hidden display quantity.
37707	MDOrderPriority	uInt64		C	Order priority for execution on the order book. A lower value is a higher priority. Value is unique for all orders within a market segment and assigned for all orders.
37708	OrderUpdateAction	uInt8	0=New 1=Update 2=Delete	C	Order book update action to be applied to the order referenced by OrderID.
9633	ReferenceID	uInt8		C	Reference to corresponding Price and Security ID, sequence of 268-NoMDEntries in a message.

- MDP 3.0 - Market Data Security Status —

Tag	Name	FIX Type	Enumeration	Req	Description
60	TransactTime	UTCTimestamp		Y	Start of event processing time (UTC). UTC Timestamps are sent in number of nanoseconds since Unix epoch synced to a master clock to microsecond accuracy.
75	TradeDate	LocalMktDate		Y	Indicates the date of the trade session. Sent as number of days since Unix epoch (Jan. 1, 1970) local time.
5799	MatchEventIndicator	String	ex. 10000000 - last message in the event ex. 00000000 - not last message in the event	Y	Bitmap field of eight Boolean type indicators reflecting the end of updates for a given CME Globex Event: Bit 0: (least significant bit) Last Trade Summary message for a given event Bit 1: Last electronic volume message for a given event Bit 2: Last customer order quote message for a given event Bit 3: Last statistic message for a given event Bit 4: Last implied quote message for a given event Bit 5: Message resent during recovery Bit 6: Reserved for future use Bit 7: (most significant bit) Last message for a given event
1151	SecurityGroup	String		C	If this tag is present, 35=f message is sent for the Product Code.
6937	Asset	String		C	Product code.
48	SecurityID	Int		C	If this tag is present, 35=f message is sent for the instrument. The unique instrument ID value will not be reused until the next trade date following an instrument expiration or deletion.
326	SecurityTradingStatus	Int	2 = Trading Halt 4 = Close 15 = New Price Indication 17 = Ready to trade (start of session) 18= Not available for trading 20 = Unknown or Invalid 21 = Pre Open 24 = Pre-Cross 25 = Cross 26 = Post Close 103 = No Change	Y	Identifies the trading status applicable to the instrument or the Product Code.

327	HaltReason	Int	0 = Group schedule (default) 1 = Surveillance intervention 2 = Market event 3 = Instrument activation 4 = Instrument expiration 5 = Unknown 6 = Recovery in Process	Y	Identifies the reason for the status change. State change may be invoked due to: • surveillance intervention • market event (i.e. Velocity Logic, Request for Cross) • predetermined group status schedule • instrument activation/ expiration schedule
1174	SecurityTradingEvent	Int	0 = No Event (default) 1 = No Cancel 4= Change of Trading Session (reset statistics) 5 = Implied matching ON 6 = Implied matching OFF	Y	Identifies an additional event or a rule related to the SecurityTradingStatus (326). See MDP 3.0 - Implied Matching Status for additional information on the relationship between Security Group, Asset, and Security ID for implied instruments & groups.

- MDP 3.0 - Market Data Snapshot Full Refresh —

Message Body

Tag	Name	FIX Type	Enumeration	Req	Description
369	LastMsgSeqNumProcessed	SeqNum		Y	The last processed packet sequence number of the real-time channel as of the time the snapshot was generated. This value is used to synchronize the snapshot with the real-time feed.
911	TotNumReports	Int		Y	Total number of instruments replayed in the loop.
48	SecurityID	Int		Y	Unique Security ID. The unique instrument ID value will not be reused until the next trade date following an instrument expiration or deletion.
83	RptSeq	Int		Y	Sequence Number of the last Instrument Entry reflected in the message.
37709	NoChunks	uInt32		C	Total number of packets that constitute a single instrument order book.
37710	CurrentChunk	uInt32		C	Chunk sequence.
60	TransactTime	UTCTimestamp		Y	Start Transaction Time of the last event security participated in. UTC Timestamps are sent in number of nanoseconds since Unix epoch synced to a master clock to microsecond accuracy.
1682	MDSecurityTradingStatus	Int	21=Pre Open 15=New Price Indication 17=Ready to trade (start of session) 2=Trading halt 18=Not available for trading 4=Close 26=Post Close 20=Unknown or Invalid 24 = Pre-Cross 25 = Cross	N	Identifies the current state of the instrument.
75	TradeDate	LocalMktDate		Y	Indicates the date of the trade session. Sent as number of days since Unix epoch (Jan. 1, 1970) local time.

779	LastUpdateTime	UTCTimestamp		Y	Date and Time of Last Security Definition Add/Modify or Delete on a given channel. UTC Timestamps are sent in number of nanoseconds since Unix epoch synced to a master clock to microsecond accuracy. **Note:** If the client system experiences a mid-week failure, this tag value can be used to identify if any instrument updates have been missed.
1149	HighLimitPrice	Price		C	Upper price threshold for the instrument. Orders submitted with prices above the upper limit will be rejected.
1148	LowLimitPrice	Price		C	Lower price threshold for the instrument. Orders submitted with prices below the lower limit will be rejected
1143	MaxPriceVariation	Price		C	Differential static value for price banding. In continuous trading mode: Buy orders submitted above (Last Best Price + Max Price Variation) will be rejected. Sell orders submitted bellow (Last Best Price - Max Price Variation) will be rejected. **Note:** Max Price Variation will not be provided for option instruments with dynamic Price Banding Values.
268	NoMDEntries	NumInGroup		Y	Indicates number of repeating groups and length of each repeating group in Market Data message.

Market by Price (MBP) Data Block

Tag	Name	FIX Type	Enumeration	Req	Description
269	MDEntryType	Char	0 = Bid 1 = Offer E = Implied Bid F = Implied Offer 2 = Trade 4 = Opening Price 6 = Settlement Price 7 = Session High Trade Price 8 = Session Low Trade Price N = Session High Bid O = Session Low Offer B = Cleared Trade Volume C = Open Interest W = Fixing Price e = Electronic Volume	Y	Market Data Entry Type.
270	MDEntryPx	Price		C	Price of the MD Entry.
271	MDEntrySize	Qty		C	Quantity of the MD Entry. In a Book Entry– order quantity In a Trade Entry – traded quantity In Electronic Volume represents cumulative traded volume of the Daily Trade session.
346	NumberOfOrders	Int		C	Aggregate number of orders at the given price level.
1023	MDPriceLevel	Int		C	Aggregate book position. Any number from 1 to 10 is acceptable.

286	OpenCloseSettlFlag	Int	0 = Daily Open Price 5 = Indicative Opening Price (IOP)	C	Condition describing a quote, trade or statistic entry
731	SettlPriceType	String	Examples: 00000111 – Final Actual Settlement at Trading Tick 00000101 – Final Theoretical Settlement at Trading Tick 00000100 – Preliminary Settlement at Trading Tick 00000000 – Preliminary Settlement at Clearing Tick	C	Bitmap field of eight Boolean type indicators representing settlement price type: Bit 0: (least significant bit): 1=Final 0=Preliminary Bit 1: 1=Actual 0=Theoretical or Undefined **Note:** Typically, there are two rounds of preliminary settlement prices disseminated. The early round of preliminary settlement prices will have Bit 1 set to 0 (Undefined). Bit 2: 1=Settlement at Trading Tick 0=Settlement at Clearing Tick Bit 3: 1=Intraday 0=Undefined Bit 4-6: Reserved for future use, set to 0 Bit 7: 0=not NULL 1=entire set is a NULL
5796	TradingReferenceDate	LocalMktDate		C	Date of trade session corresponding to a statistic entry. Sent in number of days since Unix epoch.

Market by Order (MBO) Data Block

Tag	Name	FIX Type	Enumeration	Req	Description
37	OrderID	Int		C	Unique ID assigned by CME Globex to identify orders.
269	MDEntryType	Char	0 = Bid 1 = Offer	Y	Market Data Entry Type.
270	MDEntryPx	Price		C	Price of the MD Entry.
37706	MDDisplayQty	Qty		C	Visible quantity of an order to the market. Orders may have additional hidden display quantity.
37707	MDOrderPriority	Int		C	Order priority for execution on the order book. A lower value is a higher priority. Value is unique for all orders within a market segment and assigned for all orders.

- MDP 3.0 - Request for Quote —

Tag	Name	FIX Type	Enumeration	Req	Description
60	TransactTime	UTCDateTime		Y	Start Time of Quote Request event. UTC Timestamps are sent in number of nanoseconds since Unix epoch synced to a master clock to microsecond accuracy.

5799	MatchEventIndicator	String	ex. 10000001 – end of trade summaries, end of event ex. 10000100 – end of quotes, end of event ex. 00001000 – end of statistics, not the end of event	Y	Bitmap field of eight Boolean type indicators reflecting the end of updates for a given CME Globex Event: Bit 0: (least significant bit) Last Trade Summary message for a given event Bit 1: Last electronic volume message for a given event Bit 2: Last customer order quote message for a given event Bit 3: Last statistic message for a given event Bit 4: Last implied quote message for a given event Bit 5: Message resent during recovery Bit 6: Reserved for future use Bit 7: (most significant bit) Last message for a given event
131	QuoteReqID	String		N	Quote request ID defined by the exchange.
146	NoRelatedSym	Int	1	Y	Indicates the number of repeating symbols specified. Indicates number of repeating groups and length of each repeating group in the message.
55	Symbol	String		Y	Instrument Name or Symbol (ex. 6EN2 P1220)
48	SecurityID	Int		Y	Unique instrument ID. The unique instrument ID value will not be reused until the next trade date following an instrument expiration or deletion.
537	QuoteType	Int	1=Tradable	Y	Type of quote requested. A tradable quote can trade against other orders and quotes upon acceptance
38	OrderQty	Int		N	Quantity requested.
54	Side	Int	1=Buy 2=Sell 8=Cross	N	Side requested.

- MDP 3.0 - Security Definition —

Tag	Name	FIX Type	Req	Enumeration	Description
5799	MatchEventIndicator	String	Y	ex. 10000000 – Security Definition message is the last message of the event ex. 00000000 – Security Definition is not the last message of the event	Bitmap field of eight Boolean type indicators reflecting the end of updates for a given CME Globex Event: Bit 0: (least significant bit) Last Trade Summary message for a given event Bit 1: Last electronic volume message for a given event Bit 2: Last customer order quote message for a given event Bit 3: Last statistic message for a given event Bit 4: Last implied quote message for a given event Bit 5: Message resent during recovery Bit 6: Reserved for future use Bit 7: (most significant bit) Last message for a given event **Note** MatchEventIndicator is not supported on the Instrument Recovery feed.
911	TotNumReports	Int	N		Total number of instruments in the Replay loop. Used on Replay Feed only.
980	SecurityUpdateAction	Char	Y	A=Add D=Delete M=Modify	Included in the message on the Incremental feed when a mid-week deletion or modification (i.e. extension) occurs. **Add** represents Security Definition messages that are: • Newly added during the current week • Disseminated during the Sunday Startup period • Resent by the system during the week **Modify** represents modifications to a Security Definition **Delete** represents deletions of a Security Definition

779	LastUpdateTime	UTCTimestamp	Y		Timestamp of when the instrument was last added, modified or deleted. UTC Timestamps are sent in number of nanoseconds since Unix epoch synced to a master clock to microsecond accuracy.
1180	ApplID	String	Y		The channel ID as defined in the XML Configuration file.
1300	MarketSegmentID	Int	C		Identifies the market segment. Populated for all CME Globex instruments.
55	Symbol	String	Y	e.g. '6EN2 P1220', 6AZ4 …	Instrument Name or Symbol. Previously used as Instrument Group Code.
48	SecurityID	Int	Y		Unique instrument ID as qualified by the exchange per tag 22-SecurityIDSource. The unique instrument ID value will not be reused until the next trade date following an instrument expiration or deletion.
22	SecurityIDSource	String	Y	8=Exchange symbol	Identifies source of tag 48-SecurityID value. This value is always 8 for CME is required if tag 48-SecurityID is specified.
200	MaturityMonthYear	Month-year	C		This field provides the calendar month reflected in the instrument symbol (tag 55-Symbol in MDP 3.0; tag 107-SecurityDesc in iLink). Format YYYYMM (e.g., 201912) For futures spreads and options spreads, this field contains the first leg's calendar month reflected in the instrument symbol. For packs and bundles, this value represents the quarterly contract reflected in the instrument symbol. For daily products, this tag contains the full calendar date as reflected in the instrument symbol. Format YYYYMMDD (e.g. 20191205). For weekly options products, this tag contains the calendar month and week indicator reflected in the instrument symbol. Format YYYYMMwW (e.g., for the 4th week contracts, 2019124).
1151	SecurityGroup	String	Y		Security Group Code. This tag was previously used as Product Code. An exchange specific code assigned to a group of related securities, which are concurrently affected by market events.
6937	Asset	String	Y		String field that indicates the underlying asset code (Product Code). Example: GE (Eurodollars), ES (E-Minis). *Product Code was previously communicated in tag 1151-SecurityGroup.*
167	SecurityType	String	C	• FUT = Future or Future Spread • OOF = Options on Futures or Options on Futures Spread • MLEG = Spread with mixed type legs • IRS = Interest Rate Swaps • FXSPOT = FX Spot	Security Type
461	CFICode	String	Y		ISO standard instrument categorization code.
201	PutOrCall	Int	C	0=Put 1=Call	Indicates whether an option instrument is a put or call.
762	SecuritySubType	String	C		Indicates Spread or Combo type. **Covereds** For a Covered options spread, the covered spread type will be preceded by 'CV:' followed by the Spread Type code; for example, for a Covered vertical, this tag will contain 'CV:VT.' For a covered option outright, this tag will contain 'CV:FO.'
9779	UserDefinedInstrument	String	C	Y=User defined instrument N=Not a user defined instrument	Identifies user-defined instruments. If the tag is not present, the instrument is not user-defined.
462	UnderlyingProduct	Int	Y	2=Commodity /Agriculture 4=Currency 5=Equity 12=Other 14=Interest Rate 15=FX Cash 16=Energy 17=Metals	Indicates the product complex.

207	SecurityExchange	Exchange	Y	XCBT = Chicago Board of Trade XCME = Chicago Mercantile Exchange XNYM = New York Mercantile Exchange XCEC= COMEX (Commodities Exchange Center) XKBT = Kansas City Board of Trade XMGE = Minneapolis Grain Exchange DUMX = Dubai Mercantile Exchange XKLS = Bursa Malaysia XKFE = Korea Exchange NYUM = XNYM-DUMX inter-exchange spread MGKB = XMGE-XKBT inter-exchange spread MGCB = XMGE-XCBT inter-exchange spread CBCM = XCME-XCBT inter-exchange spread XFXS = CME FX Link spread GLBX = FX Spot leg	Exchange used to identify a security.
1682	MDSecurityTrading Status	Int	N	21 = Pre Open 15 = New Price Indication 17 = Ready to trade (start of session) 2 =Trading halt 18 = Not available for trading 4 = Close 26 = Post Close 20 = Unknown or Invalid 24 = Pre-Cross 25 = Cross	Identifies the current state of the instrument.
202	StrikePrice	Price	C		Strike Price for an option.
947	StrikeCurrency	Currency	C		Currency in which the StrikePrice is denominated.
15	Currency	Currency	Y		Identifies currency used for price.
120	SettlCurrency	Currency	C		Identifies currency used for settlement price, if different from trade price currency.
9850	MinCabPrice	Price	C		Defines cabinet price for outright options products.
5770	PriceRatio	Float	C		Used for price calculation in spread and leg pricing for Implied Intercommodity Ratio Spreads.
1142	MatchAlgorithm	String	Y	F=First In, First Out (FIFO) K=Configurable C=Pro-Rata A=Allocation T=FIFO with LMM O=Threshold Pro-Rata S=FIFO with TOP and LMM Q=Threshold Pro-Rata with LMM Y=Eurodollar options	Matching Algorithm - CME assigned values.
562	MinTradeVol	Qty	Y		The minimum trading quantity for a security.
1140	MaxTradeVol	Qty	Y		The maximum trading quantity for a security.
969	MinPriceIncrement	Float	C		Minimum constant tick for the instrument. For VTT-eligible products, this tag will contain 'NULL' for Options and '0' for User Defined Spreads (UDS).

1146	MinPriceIncrementAmount	Amt	N		UNDER DEVELOPMENT
9787	DisplayFactor	Float	Y		Contains the multiplier to convert the CME Globex display price to the conventional price.
6350	TickRule	uInt	C	1, 2, ….12 See Variable Tick Table for full list of values.	VTT code. Provided for instruments with variable tick in addition to Tick Size in tag 969 MinPriceIncrement. For VTT ineligible instruments, this field will be sent as null.
37702	MainFraction	uInt	C	Valid values: 1, 2, 4, 8, 16, 32, 64	Price denominator of main fraction.
37703	SubFraction	uInt	C	Valid values: 1, 2, 4, 8, 16, 32, 64	Price denominator of sub fraction.
9800	PriceDisplayFormat	Int	C		Number of digits to the right of tick mark; location of tick mark between whole and non-whole numbers. Example: where tag 9800=3, display fractional price as: 112'200
711	NoUnderlyings	NumInGroup	C		Indicates the number of underlying futures instruments that make up the option instrument.
311	UnderlyingSymbol	String	C	e.g. ESU3, 6AZ4 …	Underlying instrument symbol (Contract Name). This value will be the same as that contained in underlying instrument's Security Definition Tag 55-Symbol and may be used to identify the underlying future instrument of the option. **Recommended** To identify the underlying futures instrument of the option, it is recommended customers use tag 309-UnderlyingSecurityID, which maps to the tag 48-SecurityID of the underlying futures instrument. This tag is available for option Instruments. It is not available for UDS or Futures Instruments.
309	UnderlyingSecurityID	Int	C		Underlying instrument ID. This value will be the same as that contained in underlying instrument's Security Definition tag 48-SecurityID. It is recommended this tag be used to identify the underlying tradable futures instrument of the option. This method will **not** work for options on futures spreads (Calendar Spread Options), since the underlying future is synthetic and non-tradable. To identify the underlying tradable future, customers should contact GCC.
305	UnderlyingSecurityIDSource	String	C	8	This value is always '8' for CME.
555	NoLegs	NuminGroup	C		Number of legs (repeating groups). Indicates number of repeating groups and length of each repeating group.
602	LegSecurityID	Int	C		Unique instrument ID for the leg.
603	LegSecurityIDSource	String	C	8=CME	Identifies source of tag 602-LegSecurityID value. This value is always '8' for CME.
624	LegSide	Char	C	1=Buy 2=Sell	The side of the leg for this repeating group.
623	LegRatioQty	Int	C		The ratio of quantity for this individual leg relative to the entire multi-leg instrument.
566	LegPrice	Price	C		Price for a futures leg of a covered. See tag 44-Price of the iLink New Order message for description.
1017	LegOptionDelta	Float	C		Delta used to calculate the quantity of futures used to cover the option or option spread.
1141	NoMdFeedTypes	Int	Y		Number of repeating FeedType repeating group entries. Indicates number of repeating groups and length of each repeating group in the message.
1022	MDFeedType	String	Y	GBX=CME Globex Book Depth GBI=CME Globex Implied Book Depth	Describes a class of service for a given data feed.
264	MarketDepth	Int	Y		Identifies the depth of book.
864	NoEvents	NuminGroup	Y		Number of repeating EventType entries. Indicates number of repeating groups and length of each repeating group in the message.

865	EventType	Int	Y	5=Activation 7=Last eligible trade date	Code to represent the type of event.
1145	EventTime	UTCTimestamp	Y		Date and Time of event expressed in UTC DateTime. UTC Timestamps are sent in number of nanoseconds since Unix epoch synced to a master clock to microsecond accuracy.
870	NoInstAttrib	NumInGroup	Y		Number of repeating group InstrAttribType entries. Indicates number of repeating groups and length of each repeating group in the message.
871	InstAttribType	Int	Y	24=Eligibility	Tag 871-InstAttribType and tag 872-InstAttribValue function together where tag 871 indicates the type of value that the following tag 872 will contain.
872	InstAttribValue	String	Y		Bitmap field of 32 Boolean type indicators: **0 (least significant bit):** Electronic Match Eligible 1: Order Cross Eligible 2: Block Trade Eligible 3: EFP Eligible 4: EBF Eligible 5: EFS Eligible 6: EFR Eligible 7: OTC Eligible 8: iLink Mass Quoting Eligible 9: Negative Strike Eligible 10: Negative Price Eligible 11: Is Fractional (indicates product has fractional display price) 12: Volatility Quoted Option 13: RFQ Cross Eligible 14: Zero Price Eligible 15: Decaying Product Eligibility 16: Variable Quantity Product Eligibility 17: Under development 18: GT Orders Eligibility (Previously Tag 827) 19: Implied Matching Eligibility (Previously tag 1144) 20-31 – Reserved for future use
1234	NoLotTypeRules	NuminGroup	C		Number of quantity types in the upcoming repeating group. Indicates number of repeating groups and length of each repeating group in the message.
1093	LotType	Char	C	2=minimum order entry quantity for an instrument 3=the minimum qty required for a block trade 4=Round lot (Variable Quantity Products)	The quantity type used for the leg of the spread. This tag is required to interpret the value in tag 1231-MinLotSize.
1231	MinLotSize	Qty	C		Minimum quantity accepted for order entry. If tag 1093-LotType=4, this value is the minimum quantity for order entry expressed in the applicable units, specified in tag 996-UnitOfMeasure, (e.g., megawatts).
1435	Contract Multiplier Unit	Int	C	1=multiplied by hour 2=multiplied by day	Indicates the type of multiplier being applied to the product. Optionally used in combination with tag 231-ContractMultiplier.
1439	FlowScheduleType	Int	C	0=NERC Eastern Off-Peak 1=NERC Western Off-Peak 2=Calendar-All Days in month 3=NERC Eastern Peak 4=NERC Western Peak	The schedule according to which the electricity is delivered in a physical contract, or priced in a financial contract. Specifies whether the contract is defined according to the Easter Peak, Eastern Off-Peak, Western Peak or Western Off-Peak.
231	Contract Multiplier	Int	C		Number of deliverable units per instrument, e.g., peak days in expiration month or number of calendar days in expiration month. The market data Security Definition (tag 35-MsgType=d) message for the variable quantity spread will be populated with the value '0' for tag 231-ContractMultiplier. The market data Security Definition (tag 35-MsgType=d) message is populated with values for the outright legs for tag 231-ContractMultiplier and customers must extract this value.

996	UnitOfMeasure	String	C	See Tag 996-UnitOfMeasure Table of Valid Values	Unit of measure for the product's original contract size. This will be populated for all products listed on CME Globex. USD unit of measure can be in U.S. dollars or cents.
1147	UnitOfMeasureQty	Float	C		This field contains the contract size for each instrument. Use in combination with tag 996-UnitofMeasure. For example: Eurodollar futures -Tag 1147=1000000 -Tag 996=USD Live Cattle futures -Tag 1147=40000 -Tag 996=LBS For variable-quantity products, the contract size reflects the original contract size, before the application of the multiplier
5818	DecayQty	Qty	C		Indicates the quantity that a contract will decay daily by once the decay start date is reached.
5819	DecayStartDate	Date	C		Indicates the date at which a decay contract will begin to decay.
5849	OriginalContractSize	Qty	C		Fixed contract value assigned to a product.
1149	HighLimitPrice	Price	N		Allowable high limit price for the trading day. A key parameter in validating order price. Used as the upper band for validating order prices. Orders submitted with prices above the upper limit will be rejected. This price protects off prices for quoting. **Note**: This value is indicative only and may not reflect the actual real-time high limit price.
1148	LowLimitPrice	Price	N		Allowable low limit price for the trading day. A key parameter in validating order price. Used as the lower band for validating order prices. Orders submitted with prices below the lower limit will be rejected. This price protects off prices for quoting. **Note**: This value is indicative only and may not reflect the actual real-time low limit price.
1143	MaxPriceVariation	Price	C		Differential value for price banding.
1150	TradingReferencePrice	Price	C		Trading reference price. For instruments with activity this price is Actual. For pre-listed instruments and instruments with no activity, this price is Theoretical.

731	SettlPrice Type	String	C	Examples: 00000111 – Final Actual Settlement at Trading Tick 00000101 – Final Theoretical Settlement at Trading Tick 00000100 – Preliminary Settlement at Trading Tick 00000000 – Preliminary Settlement at Clearing Tick	Bitmap field of eight Boolean type indicators representing settlement price type: Bit 0: (least significant bit): 1=Final 0=Preliminary Bit 1: 1=Actual 0=Theoretical or Undefined **Note:** Typically, there are two rounds of preliminary settlement prices disseminated. The early round of preliminary settlement prices will have Bit 1 set to 0 (Undefined). Bit 2: 1=Settlement at Trading Tick 0=Settlement at Clearing Tick Bit 3: 1=Intraday 0=Undefined Bit 4-6: Reserved for future use, set to 0 Bit 7: 0=not NULL 1=entire set is a NULL
5796	TradingReferenceDate	LocalMktDate	C		Trading Session Date corresponding to the settlement price in tag 1150-TradingReferencePrice. Sent in number of days since Unix epoch. May contain null value when Trading Reference Price is not available for the instrument.
5792	OpenInterestQty	Int	C		The total open interest for the market at the close of the prior trading session.
5791	ClearedVolume	Int	C		The total cleared volume of instrument traded during the prior trading session.
1647	NoRelatedInstruments	Int	N		Number of related instruments group
1649	RelatedSymbol	String	N		Related Instrument Symbol • For premium option, the volatility strike symbol will be referenced • For volatility option, the premium strike symbol will be referenced
1650	RelatedSecurityID	Int			Related Security ID • For premium option, the volatility strike ISIN will be referenced • For volatility option, the premium strike ISIN will be referenced
1651	RelatedSecurityIDSource	Char	N		Related Security ID source

- MDP 3.0 - TCP Replay Messages —

Logon from Client System to MDP

The **Market Data Logon (tag 35-MsgType=A)** message is sent by the client system to MDP to initiate logon.

Required fields are:

Tag	Name	FIX Type	Enumeration	Req	Description
35	MsgType	Char	A	Y	Message Type
553	Username	String		Y	User ID or username.
554	Password	String		Y	Password or pass phrase.
10	CheckSum	String		Y	Always last tag in message. Functions as end-of-message delimiter.

Logon from MDP to Client System

The **Market Data Logon (tag 35-MsgType=A)** message is sent from MDP to the client system to confirm logon. This message is SBE encoded.

Tag	Name	FIX Type	Enumeration	Req	Description

35	MsgType	Char	A	Y	Message Type
108	HeartBtInt	Int		Y	Heartbeat interval (seconds).

Market Data Replay Request

The **Market Data - Replay Request (tag 35-MsgType=V)** message is sent by the client system to request a range of messages for recovery. Required fields:

Tag	Name	FIX Type	Enumeration	Req	Description
35	MsgType	Char	V	Y	Message Type
1180	ApplID	String		Y	The channel ID from the XML Configuation file for which this request is made.
262	MDReqID	String		Y	Unique identifier for Market Data Request.
1182	ApplBeginSeqNo	SeqNum		Y	Message sequence number of the first message in range to be re-sent. If the request is for a single message, tag 1182-ApplBeginSeqNo and tag 1183-ApplEndSeqNo are the same.
1183	ApplEndSeqNo	SeqNum		Y	Message sequence number of last message in range to be re-sent. The maximum number of messages that can be requested in a given request is 2000.
10	CheckSum	String		Y	Always last tag in message. Functions as end-of-message delimiter.

Logout

The **Market Data Logout (tag 35-MsgType=5)** message is sent from MDP to confirm logout. This message is SBE encoded.

Tag	Name	FIX Type	Enumeration	Req	Description
35	MsgType	Char	5	Y	Message Type
58	Text	String		Y	Free format text string. May include logout confirmation or reason for the request reject and logout.