Product 3

20 Price levels of the local market

Market Data BMV

Version 1.1

https://www.bmv.com.mx/es/productos-de-informacion/market-data

Contents

"INTRA Multicast" characteristics for capital Market instruments traded through MoNeT the BMV's trading engine. The Mexican Stock Exchange through this channel, and using Multicast standard, provides the main book total depth. "INTRA Multicast" uses several orders messages to track a client's life order.

1: Depth

The message will contain only the 20 best sale or buy prices. Sent at the beginning of the day with current offers and updated during normal trading session.

Will be sent every time a value (whichever side) of the 20 levels changes. However, 20 levels are not always sent as this depends on the number of existing levels on the instrument being this smaller.

The levels are grouped by price with number of orders and stocks at such level. Purchase or sale levels indicates how many prices are received by message.

Data Type	Offset	Size	Value	Notes
Message type	0	1	"1"	Market depth
Instrument number	1	4	Int32	Unique code during instruments life
Side	5	1	Int8	O - Buy, 1 - Sell
Purchase or sale levels	6	1	Int8	Number of buy or sale levels to be sent
Price-1	7	8	Price (8)	First level price
Number of orders-1	15	2	Int16	First level number of orders
Volume-1	17	4	Int32	First level accrued volume
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2: Probable allocation price

Sent during any auction type (Opening, Continuous, Volatility and Intraday) and only on instruments where there is already a virtual match or pre-allocation.

Contains probable price and maximum volume to be allocated to the instrument at the end of the auction. Sent as soon as a one of these 2 data is changed.

Data type	Offset	Size	Value	Notes
Message type	0	1	"2"	Probable allocation price
Instrument number	1	4	Int32	Unique code during instruments life
Probable allocation price	5	8	Precio (8)	
Volume	13	4	Int32	Maximum volume to be traded
	Total:	17		

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3: Continuous auctions beginning

Sent at the moment one of the Continuous, Volatility or SIC auctions is generated.

Data type	Offset	Size	Value	Notes
Message type	0	1	"3"	Auctions start
Instrument number	1	4	Int32	Unique code during instruments life
Beginning time of auction	5	8	Timestamp(2)	Time at which auction begins
End auction time	13	8	Timestamp(2)	Time at which auction ends
	Total:	21		

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4: Status changes

All instruments are in a certain status before and during trading session. Instrument status message is generated at the beginning of the day and when the instrument enters a trading phase: Offers cancellation, Opening Auction, Continuous Trading or when entered into operating mode, for example: Auctions and Suspensions.

Data type	Offset	Size	Value	Notes
Message type	0	1	"4"	Change of Instrument Status
Instrument number	1	4	Int32	Unique code during instruments life
Instrument status	5	1	ALPHA	See the Instrument Status Catalog on the Connections and Appendix document
	Total:	6		

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5: Middle Price existing quotes

Generated when an instrument enters a posture in the hidden electronic Middle Price book. When postures are cancelled or withdrawn from the Middle Price hidden electronic book leaving it empty, another message is delivered indicating postures absence.

Data type	Offset	Size	Value	Notes
Message type	0	1	"5"	To Middle Price existing posture
Instrument number	1	4	Int32	Unique code during instruments life
Existing Postures	5	1	ALPHA	For value equal to "1", True (there are postures), otherwise False (there are no postures).
	Total:	6		

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E: Tradability

Message sent every half hour during trading session, informing general tradability by instrument.

Data type	Offset	Size	Value	Notes
Message type	0	1	"E"	Statistics per instrument
Instrument Number	1	4	Int32	Unique code during instruments life
Number of operations	5	4	Int32	Number of operations
Volume	9	8	Int64	Traded volume
Amount	17	8	Price (8)	Traded amount
Opening Price	25	8	Price (8)	Opening price
Maximum	33	8	Price (8)	Maximum price
Minimum	41	8	Price (8)	Minimum price
Average	49	8	Price (8)	Average price of the day
Last	57	8	Price (8)	Last time price
Total:		65		

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H: Trade Cancellation

This message is sent when a transaction is cancelled from the BMV system. The operation is identified with the Instrument and Number fields. Currently, it can only be sent during trading session.

Data type	Offset	Size	Value	Notes
Message type	0	1	"H"	Trades cancellation
Instrument number	1	4	Int32	Unique code during instruments life
Trade Number	5	4	Int32	Stamp number by instrument
Total:		9		

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M: Weighted Average Price - Settlement prices

For equities market, this message will be sent for each operation containing weighted average price per instrument generated within WAP calculation period (last 20 minutes of trading). When trades cease to exist within this period, WAP will be just zeros.

As for the derivatives market, this message will be sent when settlements prices have ceased to be generated.

Data type	Offset	Size	Value	Notes
Message type	0	1	"M"	Weighted Average Price / Settlement price
Instrument number	1	4	Int32	Unique code during instruments life
Weighted average price	5	8	Price (8)	Average price instrument.
Volatility	13	8	Price (8)	Volatility instrument.
Total:		21		

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O: Best Offer

Message sent by instrument when best offer changes in the electronic book. It indicates which side has changed, sell or buy.

Sent from the first trading session phase onto the completion of continuous trading.

Data Type	Offset	Size	Value	Notes
Message type	0	1	"O"	Best offer by instrument
Instrument number	1	4	Int32	Unique code during instruments life
Volume	5	4	Int32	Best offer volume
Price/Rate	9	8	Price (8)	Best offer price
Offer direction	17	1	ALPHA	C-Buy V-Sell
Operation type	18	1	ALPHA	See the Operation Type Catalog on the Connections and Appendix document
	Total:	19		

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P: Capital trades

Contains information on any BMV accepted transaction.

Data type	Offset	Size	Value	Notes
Message type	0	1	"P"	Capital market trades
Instrument number	1	4	Int32	Unique code during instruments life
Trade time	5	8	Timestamp(2)	Time the operation was carried out
Volume	13	4	Int32	Traded stocks
Price	17	8	Price (8)	Operation price
Concertation type	25	1	ALPHA	See the Concertation Type Catalog on the Connections and Appendix document
Trade Number	26	4	Int32	Stamp number by instrument
Price Setter	30	1	ALPHA	For value equal to 1, be taken as true; otherwise, false.
Operation type	31	1	ALPHA	See the Type of Operation Catalog on the Connections and Appendix document
Amount	32	8	Precio(8)	
Buy	40	5	ALPHA	Buyers' brokerage house short key
Sell	45	5	ALPHA	Seller's brokerage house short key
Settlement	50	1	ALPHA	See the Settlement Type Catalog on the Connections and Appendix document
Auction Indicator	51	1	ALPHA	"P" – Opening Auction "S" – Other Auctions " " – Continuous Market "N" – Not Applicable
	Total:	52		

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S: Events system

The system of events message is used to inform that an event has occurred, which needs to be of public domain.

Data type	Offset	Size	Value	Notes
Message type	0	1	"S"	System event
Instrument number	1	4	Int32	Always zero
Event code	5	1	ALPHA	See the System Event Codes Catalog on the Connections and Appendix document
Market	6	1	ALPHA	See the Markets Catalog (only used when there is an official recess) on the Connections and Appendix document
Sending time	7	8	Timestamp(2)	Recess's official sending time. Only used when official recess has occurred.
Ending time	15	8	Timestamp(2)	Recess official ending time. Only used when an official recess or automatic recess occurred.
	Total:	23		

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V: Virtual trades

When an operation has been pre-assigned to the at closing and average day Price electronic books, a virtual trade message is sent, where also notifying of this operation. At the end of trading session, a P message is where also notifying that the operation stops being virtual.

Data type	Offset	Size	Value	Notes
Message type	0	1	"V"	BMV Capital and Global Market Virtual Trades
Instrument number	1	4	Int32	Unique code during instruments life
Status	5	1	ALPHA	A-Addition B-Deletion
Operation type	6	1	ALPHA	See the Operation Type Catalog on the Connections and Appendix document
Number	7	4	Int32	Virtual trade number
Volume	11	4	Int32	Virtually traded securities
Concertation	15	1	ALPHA	See the Concertation Type Catalog on the Connections and Appendix document
Buy	16	5	ALPHA	Buyers' brokerage house short key
Sell	21	5	ALPHA	Seller's brokerage house short key
	Total:	26		

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Y: Mutual fund trades

Contains any mutual funds operation realized.

Data type	Offset	Size	Value	Notes
Message Type	0	1	"Y"	Mutual fund trades
Instrument number	1	4	Int32	Unique code during instruments life
Trade date	5	8	Timestamp(1)	Date operation was carried out
Price	13	8	Price (8)	Market price
Book value	21	8	Price (8)	Book value by stock
Number of sales transactions	29	4	Int32	
Sales volume	33	8	Int64	
Number of buy transactions	41	4	Int32	
Buy volume	45	8	Int64	
	Total:	53		

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Z: Registry Operations

Sent whenever there is a debt or capital instrument placement.

Data Type	Offset	Size	Value	Notes
Message type	0	1	"Z"	Registered operations
Instrument Number	1	4	Int32	Unique code during instruments life
Offer Type	5	1	ALPHA	See the Public Offerings Catalog on the Connections and Appendix document
Income	6	1	ALPHA	V-Variable income F-Fixed Income W-Warrants
Value type	7	4	ALPHA	Value type
Issuer	11	7	ALPHA	Issuers code
Series	18	6	ALPHA	Series code
Maximum Volume	24	8	Int64	
Registered Volume	32	8	Int64	
Price/Rate	40	8	Price (8)	Operation registry price
Settlement date	48	8	Timestamp(1)	
Firm	56	5	ALPHA	Managing Brokerage Firm
Movement	61	1	ALPHA	A-Registry operation U-Operation authorization C-Placement operation B-Delete operation
Total:		62		

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