



BMLL Data Feed

Trades

Date: 2026-02-09

Version: 4.9

1.1. Introduction

The BMLL Trades product is a dataset that provides details of all events related to executions and trades across all Exchanges (primary and secondary markets) and Trade Reporting Facilities in a simple, normalised format.

It provides a trade-by-trade view of all important attributes of executions occurring on multiple systems. This dataset can compute volume aggregates, analyse the market share of different mechanisms, and provide a detailed trade-by-trade view of the market.

1.2. Dataset schema

Basic Types

Type	Content	Text representation
BOOLEAN	A True or False boolean value.	1,0
INT32	A 32 bit signed integer.	12345
INT64	A 64 bit signed integer.	12345
DOUBLE	IEEE 64-bit floating point value.	123.4567
BYTE_ARRAY	An arbitrarily long byte array.	"VODAFONE GROUP"
NUMBER	A number with defined precision (total digits allowed) and scale (number of digits allowed to the right of the decimal point). Unless otherwise specified, the default is precision 38 and scale 0.	12345
VARCHAR	Variable length string up to 500 characters. May contain quotes and special characters. All text will be utf8-encoded unless indicated differently. Ticker and ISO codes should be ASCII compatible.	"VODAFONE GROUP"
TIMESTAMP_NTZ	Nanoseconds since 1970 in UTC. Timestamp will be represented in ISO format in text format.	20220302-11:23:57.12345789
FLOAT	IEEE 64-bit floating point value.	123.4567
DATE	A calendar date consisting of a year, month, and day, without including any time or time zone components.	2025-01-01

1.3. Schema

One row in the dataset corresponds to a single execution or trade during the trading day. Events can be order book executions, new trade reports, trade amendments or trade cancellations.

Trade reports can include duplicate and alternative representations of the same trade from a different point of view. When computing volumes, to avoid double counting trade reports, you should filter out trade reports that are not marked "Printable" as duplicates.

Trade amendments are always preceded by a trade cancellation. Trade cancellations always have a negative "Size" field. Aggregation on all the printable trades on specific intervals gives an accurate vision of the volume traded during that interval.

Field Name (Snowflake / Databricks)	Field Name (Parquet)	Type (Snowflake / Databricks)	Type (Parquet)	Description
EXCHANGE_TICKER	ExchangeTicker	VARCHAR	BYTE_ARRAY	Ticker as provided by the reporting venue.
TICKER	Ticker	VARCHAR	BYTE_ARRAY	FactSet ticker. It refers to the unique identifier used within the FactSet financial data platform to represent a specific security.
ISO_EXCHANGE_CODE	ISOExchangeCode	VARCHAR	BYTE_ARRAY	The ISO code of the exchange on which the trade was reported.
MIC	MIC	VARCHAR	BYTE_ARRAY	Ticker as provided by the reporting venue.
OPOL	OPOL	VARCHAR	BYTE_ARRAY	The MIC of the Original Place Of Listing for the instrument.
INSTRUMENT_ID	InstrumentId	VARCHAR	INT64	If not 0, the BMLL identifier represents the instrument to which the listing belongs. BMLL Instrument IDs are different if the primary identifier is different, the currency or the region is different.
TRADE_DATE	TradeDate	DATE	INT32	The specific date on which a

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Field Name (Snowflake / Databricks)	Field Name (Parquet)	Type (Snowflake / Databricks)	Type (Parquet)	Description
				trade was executed - the date is derived from the LocalTimestamp.
TRADE_TIMESTAMP	TradeTimestamp	TIMESTAMPNTZ	INT64	Time at which the trade was executed. The Time Zone is UTC. Generally delivered at microsecond precision.
PUBLICATION_TIMESTAMP	PublicationTimestamp	TIMESTAMPNTZ	INT64	Time at which the trade was reported. The Time Zone is UTC. Generally delivered at microsecond precision.
LOCAL_TRADE_TIMESTAMP	LocalTradeTimestamp	TIMESTAMPNTZ	INT64	Time at which the trade was executed. The Time Zone is the local timezone of the reporting venue. Generally delivered at microsecond precision.
LOCAL_PUBLICATION_TIMESTAMP	LocalPublicationTimestamp	TIMESTAMPNTZ	INT64	Time at which the trade was reported. The Time Zone is the local time zone. Generally delivered at microsecond precision.
TRADE_TIMESTAMP_NANOSECONDS	TradeTimestampNanoseconds	NUMBER	INT64	Time at which the trade was executed. The Time Zone is UTC. Nanosecond precision.
PUBLICATION_TIMESTAMP_NANOSECONDS	PublicationTimestampNanoseconds	NUMBER	INT64	Time at which the trade was reported. The Time Zone is UTC. Nanosecond precision.
TZ_OFFSET	TZOffset	NUMBER	INT32	The offset between the local timestamp and UTC in seconds. Note: This is based on the original listing location of the primary instrument. Format was +/- HHMM . This will be adjusted during the DST if such a change occurs.

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Field Name (Snowflake / Databricks)	Field Name (Parquet)	Type (Snowflake / Databricks)	Type (Parquet)	Description
BMLL_OBJECT_ID	BMLLObjectId	NUMBER	INT64	The BMLL identifier that represents the listing
TRADE_ID	TradeId	VARCHAR	BYTE_ARRAY	An ID representing the trades. This is provided directly from the exchange feed.
AGGRESSOR_SIDE	AggressorSide	VARCHAR	INT64	Side of the aggressive trade: 2: Quotes from the BID side are aggressed by an aggressive sell order. 1: Quotes from the ASK side are aggressed by an aggressive buy order. 0: Quotes where the aggressor's side is unavailable due to trade mechanism without the aggressor or information not being reported.
PRICE	Price	DOUBLE	DOUBLE	The price of the executed trade expressed in CurrencyCode.
SIZE	Size	DOUBLE	DOUBLE	The size of the execution. If the execution is a cancellation, then the size will be negative.
SEQUENCE_NO	SequenceNo	NUMBER	INT64	Sequence number - synthetic incremental number allowing to reorder messages for a security on a specific date.
CURRENCY_CODE	CurrencyCode	VARCHAR	BYTE_ARRAY	The currency of the order book information as provided by the exchange.
PRINTABLE	Printable	BOOLEAN	BOOLEAN	Printable value computed by BMLL, allowing to filter out duplicate (non-printable) trade reports. These can be synthetic trade reports or trade reports describing the same execution from the view of the

Field Name (Snowflake / Databricks)	Field Name (Parquet)	Type (Snowflake / Databricks)	Type (Parquet)	Description
				counterparty. For US markets, this is taken as whether the trade is printable to the SIP.
EXECUTION_VENUE	ExecutionVenue	VARCHAR	BYTE_ARRAY	The MIC code of the venue on which the trade did occur. Note that this can be different to the MIC code provided. For example, a trade on Liquidnet reported via CBOE BXTR would have a MIC Code of BOTC but an ExecutionVenue of LIQU
ORIGINAL_TRADE_TYPE	OriginalTradeType	VARCHAR	BYTE_ARRAY	A concatenation of flags relating to trade type as reported by the exchange in their string representation. This field is exchange dependent. On European venues, there is only one column used as input this is generally original_trade_type and trade_type (on Euronext, AQSE), cross_type (on Nasdaq venues) and match_type (on EOB venues such as XETRA, Vienna, Prague and Budapest). The exact set of flags for each venue can be accessed in the appendix below.
MARKET_MECHANISM	MarketMechanism	VARCHAR	BYTE_ARRAY	MMT 1 Flag - Market Mechanism 1: Central Limit Order Book (CLOB) 2: Quote Driven Market 3: Dark Order Book 4: Off Book 5: Periodic Auction 6: Request For Quotes 7: Any other (including hybrid)
TRADING_MODE	TradingMode	VARCHAR	BYTE_ARRAY	MMT 2 Flag - Trading Mode 1 : Undefined Auction 0 : Opening Auction

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Field Name (Snowflake / Databricks)	Field Name (Parquet)	Type (Snowflake / Databricks)	Type (Parquet)	Description
				K : Closing Auction I : Intraday Auction U : Unscheduled Auction 2 : Continuous Trading 3 : At Market Close Trading 4 : Out of Main Session Trading 5 : Trade Reporting - On Exchange 6 : Trade Reporting - Off exchange 7 : Trade Reporting (SI)
TRANSACTION_CAT EGORY	TransactionCate gory	VARCHAR	BYTE_ARRAY	MMT 3.1 Flag - Transaction Category D : Dark Trade R : Trade that received Price Improvement Z : Package Trade (Excluding physical Trades) Y : Exchange for Physical Trade
NEGOTIATED_TRAD E	NegotiatedTrade	VARCHAR	BYTE_ARRAY	MMT 3.2 Flag - Negotiation Indicator or Pre-Trade Transparency Waiver 1 : NLIQ - Negotiated Trade in Liquid Financial Instruments 2 : OLIQ - Negotiated Trade in Illiquid Financial Instruments 3 : PRIC - Negotiated Trade subject to Conditions Other Than The Current Market Price 4 : ILQD - Pre-Trade Transparency Waiver for Illiquid Instruments on an SI 5 : SIZE - Pre-Trade Transparency Waiver for Above Standard Market Size on an SI 6 : ILQD,SIZE - Pre-Trade Transparency Waiver for Illiquid and Above Standard Market Size

Field Name (Snowflake / Databricks)	Field Name (Parquet)	Type (Snowflake / Databricks)	Type (Parquet)	Description
				7 : NTL5 - Negotiated trade larger than LIS brought onto a venue 8 : NETW - Negotiated trade with pretrade transparency waiver 9 : NLIQ,NTLS - Negotiated trades in Liquid Financial Instrument A : OLIQ,NTLS B : PRIC,NTLS C : NETW,NTLS N: Negotiated Trade
CROSSING_TRADE	CrossingTrade	VARCHAR	BYTE_ARRAY	MMT 3.3 Flag Used to indicate if the trade was the result of a cross executed by the broker. X: Agency Cross Trade
MODIFICATION_INDICATOR	ModificationIndicator	VARCHAR	BYTE_ARRAY	MMT 3.4 Flag - Modification Indicator A: Trade Amendment C: Trade Cancelled
BENCHMARK_INDICATOR	BenchmarkIndicator	VARCHAR	BYTE_ARRAY	MMT 3.5 Flag B: Benchmark Trade S: Reference Price Trade
SPECIAL_DIVIDEND_INDICATOR	SpecialDividendIndicator	VARCHAR	BYTE_ARRAY	MMT 3.6 Flag E: Special Dividend Indicator
OFF_BOOK_AUTOMATED_INDICATOR	OffBookAutomatedIndicator	VARCHAR	BYTE_ARRAY	MMT 3.7 Flag M: Off-book manual Q: Off-book automated
PRICE_FORMATION	PriceFormation	VARCHAR	BYTE_ARRAY	MMT 3.8 Flag P: Plain-Vanilla Trade T: Non-Price Forming Trade J: Trade not Contributing to Price Discovery Process N: Price is currently not available - PENDING

Field Name (Snowflake / Databricks)	Field Name (Parquet)	Type (Snowflake / Databricks)	Type (Parquet)	Description
ALGORITHMIC_TRADE	AlgorithmicTrade	VARCHAR	BYTE_ARRAY	MMT 3.9 Flag H: Algorithmic Trade
PUBLICATION_MODE	PublicationMode	VARCHAR	BYTE_ARRAY	MMT 4.1 Flag 1: Non-Immediate Publication 2: Non-Immediate Publication: Deferral due to Large In Scale" 3: Non-Immediate Publication: Deferral due to "Illiquid Instrument" 4: Non-Immediate Publication: Deferral due to "Size Specific" 5 : Non-Immediate Publication : Deferral due to "Illiquid Instrument" and "Size Specific" 6 : Non-Immediate Publication : Deferral due to "Illiquid Instrument" and "Large In Size"
DEFERRAL_TYPE	DeferralType	VARCHAR	BYTE_ARRAY	MMT 4.2 Flag 1 : Limited Details Trade 2 : Daily Aggregated Trade 3 : Volume Omission Trade 4 : Four Weeks Aggregation Trade 5 : Indefinite Aggregation Trade 6 : Volume Omission Trade, Eligible to Subsequent Enrichment in Aggregated Form 7 : Full details of Earlier Limited Details Trades 8 : Full details of Earlier "Daily Aggregated Trade" 9 : Full details of Earlier "Volume Omission Trade" V : Full Details of Earlier "Four Weeks

Field Name (Snowflake / Databricks)	Field Name (Parquet)	Type (Snowflake / Databricks)	Type (Parquet)	Description
				Aggregation Trade" W : Full Details of Earlier "Volume Omission Trade, Eligible to Subsequent Enrichment in Aggregated Form""
DUPLICATIVE_INDICATOR	DuplicativeIndicator	VARCHAR	BYTE_ARRAY	MMT 5 Flag 1 : If this is a duplicate of an existing trade report
BMLL_TRADE_TYPE	BMLLTradeType	VARCHAR	BYTE_ARRAY	BENCHMARK_PRICE : Trade executed at a benchmark price CLOSING_PRICE : Trade executed at closing price DARK : Trade executed on dark order book EXCHANGE_FOR_RELATED_POSITION : Reserved LIT : Trade executed on a lit order book OTC : Reported Trade REQUEST_FOR_QUOTE : Trade executed via an RFQ venue SPECIAL_PRICE : Trade priced differently from normal market conditions - (Non-Price Forming trades, physical delivery trades, negotiated trades) UNCROSSING : Trade resulting from an auction uncross UNKNOWN: Unknown/unsupported trade type
MARKET_STATE	MarketState	VARCHAR	BYTE_ARRAY	AUCTION_ON_DEMAND: An auction that occurs concurrently with the main trading session. CLOSED: The exchange is closed -

Field Name (Snowflake / Databricks)	Field Name (Parquet)	Type (Snowflake / Databricks)	Type (Parquet)	Description
				no on-exchange trading activity is recorded during this time. CLOSING_AUCTION: Market in Closing Auction - if the market is in closing auction is restarted due to a halt, and only the last valid closing auction is selected as the closing auction. CONDITIONAL: The trade is the result of a conditional trading mechanism where trades have to be approved in more sophisticated ways. CONTINUOUS_TRADING: The venue is operating a central limit order book in continuous trading. CONTINUOUS_TRADING_PRIMARY_CLOSED: The venue is continuously trading. HALTED: Trading on the venue is temporarily halted due to technical reasons. INTRADAY_AUCTION: A scheduled auction that occurred at a defined schedule that is not an opening or a closing auction. OPENING_AUCTION: Market in Opening Auction - if the opening auction is restarted, only the last opening auction will be marked as opening auction. UNSCHEDULED_AUCTION: An unscheduled auction or a failed scheduled auction session during the day.

Field Name (Snowflake / Databricks)	Field Name (Parquet)	Type (Snowflake / Databricks)	Type (Parquet)	Description
EXCHANGE_SEQUENCE_NO	ExchangeSequenceNo	VARCHAR	INT64	The sequence number as provided by the exchange. Note that some exchanges may not provide a sequence number in this case, the ExchangeSequenceNo will always be 0.
BMLL_SEQUENCE_NO	BMLLSequenceNo	VARCHAR	INT64	The sequence no of the trade in the upstream feed as inferred by BMLL - this sequence number will respect the order of messages in upstream protocol and will be populated even if the upstream venue does not provide a sequence number - where the source of the feed is indicated by BMLLSequenceSource.
BMLL_SEQUENCE_SOURCE	BMLLSequenceSource	VARCHAR	INT64	An integer used to identify the upstream feed from which the sequence numbers are generated. This is designed to avoid the creation of a non-existent order between events that come from different message streams.

1.4. Format and file structure

Data is delivered as a single file per market per date, as a parquet file.

- **{YYYY}**: Year
- **{MM}**: Month
- **{DD}**: Date
- **{Product}**: The product you are subscribing
 - **Trades**: TRADES
- **{Region}**: The region of the venue such as APAC, AMERICAS, and EMEA
- **{MIC}**: Market Identifier Code (MIC) is a unique four-character code that identifies stock markets and exchanges for trading and referencing computer systems

File Structure:

{YYYY}/{MM}/{DD}/TRADES/{Region}/trades-{MIC}-YYYYMMDD.parquet

1.5. Data arrival times

Full product coverage and arrival times are available at <https://data.bmlltech.com>.

1.6. Notes

Aggressor side: The aggressor side is only provided for executions that can be deterministically mapped to a side of the order book. It is not inferred when there is no clear side (e.g. for an off-book trade).

Use of MMT flags: Multiple flags are taken from the FIX MMT Standard (see <https://www.fixtrading.org/mmt/>). This is provided as is when MMT flags are provided. For venues where MMT is not provided, fields are normalised to that field (for example, the ModificationIndicator)

1.7. Market State Normalisation

BMLL provides a consistent normalisation for market state messages, in order to make cross venue analysis quick and easy.

The following normalisation states are available

Market State

Value	Description
AUCTION_ON_DEMAND	Auctions which take place alongside CONTINUOUS_TRADING. Includes order entry and uncrossing periods.
CLOSED	The market is closed so no trading activity can take place.
CLOSING_AUCTION	Includes order entry and uncrossing periods.
CONDITIONAL	An uncrossing state for specific market mechanisms e.g. Turquoise Plato Uncross.
CONTINUOUS_TRADING	Main continuous trading session in which orders can be placed and matched. Separate continuous trading occurring before the primary

	open or after close will be generally indicated with PRE_TRADE and POST_TRADE.
CONTINUOUS_TRADING_PRIMARY_CLOSED	A continuous trading session in which orders can be placed and matched on secondary markets, but the primary market is CLOSED. Used for secondary markets only (e.g. a multilateral trading facility in the EU, or alternative trading system in the USA).
HALTED	Unscheduled trading halts, for example, when a circuit breaker is triggered.
INTRADAY_AUCTION	Scheduled auctions which interrupt CONTINUOUS_TRADING. Includes order entry and uncrossing periods.
NOT_APPLICABLE	Used for venues such as trade reporting facilities where the concept of market phase does not apply, as there are no specific market hours.
OPENING_AUCTION	Includes order entry and uncrossing periods.
POST_TRADE	Market phase following CONTINUOUS_TRADING phase, and generally occurring after the primary CLOSING_AUCTION. This includes trade-at-last phases; such trades can be distinguished using the CLOSING_PRICE bml_trade_type.
PRE_OPEN	Market phase preceding CONTINUOUS_TRADING, and generally prior to OPENING_AUCTION when applicable.
UNKNOWN	Used when the market phase could not be resolved into one of the known states listed here.
UNSCHEDULED_AUCTION	Unscheduled auctions which interrupt CONTINUOUS_TRADING. Includes order entry and uncrossing periods.

BMLL Trade Type

Value	Description
BENCHMARK_PRICE	Trades executed at a publicly available reference price. This includes VWAP, TWAP, EBBO, PBBO, auction reference price trades and other trades marked BENC under MIFID II.
CLOSING_PRICE	A trade executed at the closing price resulting from a Market-on-Close (MOC) order.
DARK	Dark trades result from matches on a dark order book which has either limited pre-trade transparency or is exempt from pre-trade

	transparency disclosure. An example of this is trades executed on a mid-price book.
LIT	Lit trades result from a match on a lit order book with full pre-trade transparency. This group will also include executions of hidden orders that cannot be distinguished from standard lit executions, such as iceberg orders.
OTC	An over-the-counter (OTC) trade agreed bilaterally between two parties and reported to a trade reporting facility.
REQUEST_FOR_QUOTE	A trade resulting from a request for quote (RFQ).
SPECIAL_PRICE	Trades which execute at a special price. This includes: negotiated trades, Non Price Contribution to Discovery Indicators trades (marked TNCP under MIFID II), dividends and other technical trades.
UNCROSSING	Uncrossing trades occur when paired quantities are matched at the end of an auction market phase.
UNKNOWN	Used for trades which could not be resolved into one of the known trade types listed here.
EXCHANGE_FOR_RELATED_POSITION	Arrangement between two parties whereby a futures position is exchanged for related positions or vice versa.

1.8. Venue-specific Original Trade Type

EUROPE

Venues	Name of source columns	Description of possible values in original trade type
XETR, XWBO, XBUD, XPRA	match_type	13 : Liquidity Improvement - Cross Trade 3 : Manual Trade 5 : Uncrossing Trade 7 : Auction Trade
XAMS XBRU XLIS XMIL XOSL XPAR	original_trade_type	1 - Conventional Trade (Cash and Derivatives) 2 - Large in Scale (LiS) Trade (Derivatives Only) 3 - Basis Trade (Derivatives Only) 4 - Large in Scale (LiS) Package Trade (Derivatives Only) 5 - Guaranteed Cross Trade (Cash and Derivatives) 6 - Against Actual Trade (Derivatives Only) 7 - Asset Allocation Trade (Derivatives Only) 9 - Exchange for Swap Trade (Derivatives Only) 10 - Exchange for Physical Trade - Cash Leg (Cash Only)

		20 - BoB Trade (Cash Only) 21 - SI Trade (Cash Only) 22 - AtomX Trade (Derivatives Only) 24 - Trade Cancellation (Cash and Derivatives) 25 - Out of Market Trade (Cash Only) 26 - Delta Neutral Trade - Underlying Cash Leg (Cash Only) 27 - Market VWAP Operation Trade (Cash Only) 28 - Euronext Fund Service Trade (Cash Only) 29 - Secondary Listing Trade (Cash Only) 30 - Request for Cross Trade (Derivatives Only) 31 - Request for cross strategy Leg Trade (Derivatives Only) 32 - Trade Publication (Cash Only) 33 - Dark Trade (Cash Only) 34 - Delta Neutral Trade - Underlying Future Leg (Derivatives Only) 39 - Guaranteed Cross –Negotiated deal NLIQ (Liquid) 40 - Guaranteed Cross –Negotiated deal OILQ (Liquid) 41 - Large in Scale (LIS) Trade (Cash)
XSTO, XCSE XHEL, XICE, XLIT, XRIS, XTAL	cross_type	'O': Opening Cross. 'I': Scheduled Intraday Cross. 'C': Closing Cross. 'H': Cross for halted securities. 'A': Auction On Demand.
XEQT	trade_type	'B' – VBBO trade (buy-side aggressor) 'S' – VBBO trade (sell side aggressor) 'A' – Auction trade 'O' – Opening cross trade 'C' – Closing cross trade 'U' – Uncrossing trade 'T' – Consolidated trade (Market by Limit) 'N' – Off-book, on-Exchange trade report 'b' - ALP order trade (buy-side aggressor) 's' - ALP order trade (sell side aggressor)
XATH	trade_type	'N' – Normal 'O' – Odd-Lot 'P' – Pre-Agreed (Over the Counter) 'S' – Special Terms (With the Hit & Take Method) 'F' – Forced Sales (With the Hit & Take Method)

MIDDLE EAST & AFRICA

Venues	Name of source columns	Description of possible values in original trade type
A2XX	trade_type	1 - Limit order 2 - A trade against hidden or reserve quantity in the continuous trading order book 3 - Market at Close (MaC) trade 4 - LIS Cross Trade 5 - Benchmark Cross trade 6 - Auction on Demand (AoD)
XIST	trade_cond_1	1 - Automatch Trade Other - 4 big classes of trading conditions • 208/ 19420 - Trade report cannot be done • 210/ 216/ 222/ 234/ 250/ 13132 - Trade report for wholesale transactions • 212/ 226/ 230/ 236/ 252/ 13130 - Trade report can be done from last traded price • 214/ 220/ 11278/ 11280/ 11880/ 13128/ 37170/ 37172/ 37174/ 37176 - Trade report can be done from last price with a +/- change in price range
XIST	trade_cond_2	1 - Normal Trade 2- Reported Trade 3 - All or None 4 - Part of Combo Match 5 - Midpoint Match
XJSE	original_trade_type	0 – Unknown 1 – Trade 17 – Post Contra Trade (Correction of previous day's published off-book trade) 65 – Volatility Auction 67 – Closing Auction 69 – Reopening Auction 75 – Intra-Day Auction 76 – Futures Close Out Auction 79 – Opening Auction 2001 – Block Trade 2002 – Corporate Finance Trade 2003 – Late Trade (After Hours Trade) 2006 – Off Order Book Principal Trade

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		2009 – Portfolio Trade 3001 – Book Build
XTAE	trade_source	0 - Lit Book 32 - Dark Book
XSAU	trade_cond_1	3 - Auto Match Normal Trades 4 - Auto Match Small Trades 5 - Non - Crossing Normal Put-Through OrderNoYes 6 - Crossing Normal Put -Through Order 7 - Non-Crossing Small Put Through Order 8 - Crossing Small Put Through Order 9 - OPTO: Non-Crossing On-Market NegDeal Trades 10 - OPTOx: Crossing On-Market NegDeal Trades

AMERICAS

Venues	Name of source columns	Description of possible values in original trade type
XNYS, ARCX, XASE, XCIS, XCHI	trade_cond_1	'@' – Regular Sale ' ' – (Blank) Regular Sale (NYSE and NYSE MKT only) 'C' – Cash (NYSE and NYSE MKT only) 'N' – Next Day Trade (NYSE and NYSE MKT only) 'R' – Seller (NYSE and NYSE MKT only)
XNYS, ARCX, XASE, XCIS, XCHI	trade_cond_2	' ' – N/A (space or blank) 4 – Derivatively Priced 5 – Market Centre Reopening Trade 6 – Market Centre Closing Trade 9 – Corrected Last Sale Price F – Intermarket Sweep Order (NYSE only) O – Market Center Opening Trade (NYSE only)
XNYS, ARCX, XASE, XCIS, XCHI	trade_cond_3	' ' – (space) N/A Z – Sold L – Sold Last (NYSE only) T – Extended Hours Trade (Arca, American and National only)

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		U – Extended Hours Sold (Out of Sequence) (Arca, American and National only)
XNYS, ARCX, XASE, XCIS, XCHI	trade_cond_4	I – Odd Lot Trade ' ' – (space, or 0x20) N/A H – Aberrant Trade (NYSE/NYSE MKT only) K – Rule 127 (NYSE/NYSE MKT only) @ – Regular Sale (Arca, American and National only) M – Official Closing Price (Arca, American and National only) Q – Official Open Price (Arca, American and National only) B – Average Price Trade (Arca only) E – Automatic Execution (Arca only) H – Price Variation Trade (Arca only) P – Prior Reference Price (Arca only) V – Stock-Option Trade (Arca only) X – Cross Trade (Arca only)
XNAS, XPSX, XBOS	original_trade_type	P - Non-displayed trade Q - Cross Trade
BATS, BATY, EDGA, EDGX	original_trade_type	'0' - Lit. '42' - Hidden Liquidity. '43' - Hidden Liquidity. '150' - Auction On Demand.
MEMX, EPRL	msg_original_type	'0' – Lit '10' – Dark Trade '14' – Dark Trade
@SIP	sequence_type	<space> - No extended hours or sold out of sequence. L - sold last (late reporting). T - Extended hours trade (Form T). U - Extended hours sold. Out of sequence. Z - Sold. Out of sequence.
@SIP	settlement_conditions	<space> or @ - For regular trades. C - Cash trades. N - Next day trades. R - Seller trades. Y - Yellow flag.
@SIP	sro_trade_detail	UTP origin only 1 - Stopped stock. A - Acquisition B - Bunched trade.

		D - Distribution. G - Bunched sold trade. K - Rule 155. S - Split trade. W - Average price. CTA origin only B - Average price. K - Rule 127 (Nyse Only) or Rule 155 (Nyse American only). Both of them <space> - No SRO required trade detail. E - Automation execution. H - Price variation trade. I - Odd lot trade. M - Market centre official close price. P - Prior reference price. Q - Market centre official open price. V - Contingent trade. X - Cross trade.
@SIP	trade_through_reason	<space> - No trade through exempt reason. F - Intermarket sweep order. O - Market centre opening trade. 4 - Derivative only priced. 5 - Market centre reopening trade. 6 - Market centre closing trade. 7 - Qualified contingent trade (QCT). 8 - Placeholder for 611 exemption.
XTSE, XTSX	trade_type	1 - Trade 1018 - Odd Lot Trade. This trade was between two orders on the odd lot book. 1009 - After Hours. This trade was during the extended trading session 1000 - Block. This trade was a block trade, i.e. has volume greater than or equal to 10,000 shares
XTSE, XTSX	cross_type	0 - Not applicable 1 - Internal 2 - Basis 3 - Contingent 4 - Special Trading Session 5 - VWAP 6 - Regular

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CHIC	trade_cond_1	0 – Regular Trade 1 – Bypass (Crosses Only) 2 – M-ELO (From 2024-12-16 only) 3 – CXD Pure-Stream (From 2024-12-16 only)
CHIC	trade_cond_2	0 – Regular Trade 1 – Basis 3 – VWAP 5 – Contingent 6 – Internal 12 – Derivative Related 16 – Intentional
XCX2	hidden_trade	'H' – Hidden Trade
XCX2	cross_type	'B' – Basis Cross Trade 'C' – Contingent Cross Trade 'D' – Derivative Related Cross Trade 'I' – Internal Cross Trade 'V' – VWAP Cross Trade 'X' – Intentional Cross Trade
XCX2	trade_attribute	'B' – Bypass Trade 'C' – Market-on-Close Trade 'L' – Midpoint Extended Life Order (M-ELO) Trade
NEOE, NEON, NEOD	order_book_type	3 – NEO-L 4 – NEO-N 5 – NEO-D 6 – Cross 7 – SST
NEOE, NEON, NEOD	trade_type	0 – Post-Open Trade (Continuous Trade) 1 – Auction Trade Bulk 2 – Auction Trade, Individual 9 – Trade Cancellation 11 – Trade Correction
NEOE, NEON, NEOD	cross_type	5 – Internal Cross 11 – Basis Cross 12 – Contingent Cross 14 – VWAP Cross 15 – National Cross 16 – Bypass Cross 17 – Non-NEO Cross

		18 – Derivative Cross 19 – Closing Price Publication (Closing Price broadcast, not a trade)
XCNQ	trade_cond_2	Bit-like string field, with each digit representing a trade condition flag. Digit value 1 = False, 2 = True 1xxxx – Sets Last x1xxx – Opening Trade xx1xx – CCP xxx1x – Bypass xxxx1 – Odd Lot
LYNX	hidden_trade	'H' – Hidden Trade
LYNX	cross_type	'D' – Derivative Cross Trade 'I' – Internal Cross Trade 'M' – Intentional Cross Trade
LYNX	trade_attribute	'B' – Bypass trade
OMGA	trade_cond_1	0 – No conditions 1 – Basis 2 – Special Trading Session 3 – VWAP 4 – Dark Pool Trade 5 – Contingent Cross 6 – Internal Cross 7 – National Cross 11 – Regular Cross 13 – Odd Lot Trade 16 – Intentional 18 – CCP Closing Price
XATS	trade_cond_1	0 – No conditions 1 – Basis 2 – Special Trading Session 3 – VWAP 4 – Dark Pool Trade 5 – Contingent Cross 6 – Internal Cross 7 – National Cross

		11 – Regular Cross 13 – Odd Lot Trade 16 – Intentional 18 – CCP Closing Price
@CCB	trade_cond_1	0 – No conditions 1 – Basis 2 – Special Trading Session 3 – VWAP 4 – Dark Pool Trade 5 – Contingent Cross 6 – Internal Cross 7 – National Cross 11 – Regular Cross
BVMF	trade_cond_1	0: Trade made in electronic session 1: Cross trade 24: After-market trade 25: Retail liquidity trade - private book 26: Out-of-sequence trade
XMEX	trade_cond_1	0 - FirmOrder 1 - WithoutConcertation 2 - BuyAutoEntry 3 - BuyLegAutoEntryOfRollover 4 - LegOfRoundOfRollover 5 - SellAutoEntry 6 - CrossingOperation 7 - DepthOfRoundOfChainOfForwards 8 - OperationAfterClosing 9 - TradingOfChainOfForwards 10 - BlockTrade 11 - DepthOfRound 12 - LegOfBlockTradeForChainOfForwards 13 - RoundOfChainOfForwards 14 - LegOfChainOfForwards 15 - RolloverSentra 16 - OperationAtClosingPrice 17 - TypeRound 18 - Auctions 19 - LegOfBlockTradeOfRollover 20 - LegOfCrossingOfForeignCurrencyStrategy 21 - LegOfBlockTradeOfForeignCurrencyStrategy 22 - SellLegAutoEntryOfForeignCurrencyStrategy 23 - BlockTradeOfForeignCurrencyStrategy 24 - BuyLegAutoEntryOfForeignCurrencyStrategy 25 - BlockTradeOfChainOfForwards 26 - OperationAtMediumPrice

		27 - BlockTradeOfRollover 28 - LegOfForeignCurrencyStrategy_1 29 - CrossingOfChainOfForwards 30 - OrderClosing 31 - OperationAtAveragePriceForTheDay 32 - SellAutoEntryOfChainOfForwards 33 - BuyAutoEntryOfChainOfForwards 34 - LegOfForeignCurrencyStrategy_2 35 - LegOfCrossingOfChainOfForwards 36 - SwapBlockTrade 37 - SellLegAutoEntryOfChainOfForwards 38 - SwapBlockTradeWithContinuousCoupon 39 - BlockTradeOfUnwind 40 - BuyLegAutoEntryOfChainOfForwards 41 - BlockTradeOfSubstitution 42 - LegOfAuctionOfChainOfForwards 43 - LegOfRoundOfChainOfForwards 44 - VwapOperationsByException 45 - ChainsOfForwards 46 - TwapOperationsByException 47 - BlockOperationsByException 48 - OtcRecentOperations 49 - LegOfRolloverCrossing 50 - OtcAgreedOperations 51 - SellLegAutoEntryOfRollover 52 - VoiceOver 53 - BasketOperationByException 54 - InavOperationAtClosingPrice 55 - InavOperationAfterClosing
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APAC

Venues	Name of source columns	Description of possible values in original trade type
XASX	occurred_at_cross	'Y' - Yes, trade occurred in an auction 'N' - No, trade occurred in continuous matching
XASX	trade_source	1 - Lit book 2 - Dark book
CHIA	trade_type	'B' - BrokerPreferredTrade 'N' - TradeResultFromNormalMatchingLogic 'O' - OpeningAuction

		'C' - ClosingAuction 'H' - HaltAuction
CHIA	trade_designation	Valid only for on-exchange executions, space otherwise C – CXAC (Limit) P – CXAP (Midpoint) N – CXAN (Near Point) F – CXAF (Far Point) M – CXAM (MOC) B – CXAB (BIDS Block Size) I – CXAI (BIDS Price Improved)
CHIA	trade_report_type	Valid only for off-exchange trade reports, space otherwise. B – Block Trade P – Large Portfolio Trade T – Large Principal Transaction S – Trades with Price Improvement L – Permitted Trade During Post Trading Hours Period M – Permitted Trade During Pre Trading Hours Period E – Out of Hours Trade F – ETF Trade Report for Unit Creations or Redemptions
XBOM	trade_cond_1	0 - No Condition 1 - Odd Lot Trade (Odd Lot Trade not available currently)
XBOM	trade_cond_5	0 - No Condition 1 - Bunched Trade Indicator: <i>If a trade is received from the exchange with a cumulative volume greater than the sum of the previous volume plus the incremental size of the trade, then a bunched trade is generated by the Consolidated Feed to reconcile the new cumulative volume.</i>
XTKS	message_id	C – Order Executed with Price E – Order Executed K – Execution Summary TI – ToSTNeT
XTKS	pricing_method	0 – – 1 – Itayose Method
XTKS	triggered_side	B – Buy Order S – Sell Order
XTKS	market_identification_flag	1 – Single Issue Transaction 2 – Basket Transaction 3 – Closing Price Transaction

BMLL Data Feed: Normalised Trades

		4 – (from BMLL) Off-Auction Own Share Repurchase Trading
XTKS	transaction_identification_flag	" – Ordinary Transaction 1 – Day Transaction 2 – Ordinary Transaction (VWAP Transaction) 3 – Day Transaction (VWAP Transaction)
XTKS	price_code	" – For transactions other than closing price transactions, trading halts and releases from trading halts 01 – Previous Day Closing Price 11 – Morning Session Closing Price 31 – Today's Closing Price
XBKK	trade_cond_1	0 - Auto Match 1 - Trade Report 2 - Auction 3 - Combo to Combo 4 - Odd Lot Trade
XBKK	trade_cond_2	0 : Auction Deal / Automatic Match 10-19 : TR_BIGLOT 20-29 : TR_BUYIN 30-39 : TR_OFFHOUR 40-49 : TR_FOREIGN 50-99 : Other 100-199 : Normal 200-229 : EFP 230-249 : Other
XKRX	is_off_book_eligible	This trade impacts the off-book volume. Boolean value.
XSES	market_type	0 - Ready 1 - UnitShare 2 - BuyIn 3 - Bonds 4 - Unknown
XSES	trade_block_count	0 - When Size < 10000 1 - When Size >= 10000
XSES	trade_cond_1	0 - No Condition 1 - Late Trade 2 - Internal Trading/Crossing 4 - Bulletin Board Table

		17 - Off Market 22 - Buy White
XSES	trade_cond_3	0 - No information 1 - Married trade 2 - All or None 4 - Part of a combo match
XSES	trade_cond_5	1 - Matched by system automatically 3 - Matched outside exchange, different brokers, trade report; married trade 5 - Matched outside exchange, one broker, trade report, crossing; married trade 20 - Deal made at the end of an auction
ROCO	trade_cond_1	0: Ordinary transaction (Normal Trade), ordinary buy, ordinary sell 1: Ordinary transaction (Normal Trade), ordinary buy, floor sell 2: Ordinary transaction (Normal Trade), ordinary buy, ceiling sell 3: Ordinary transaction (Normal Trade), floor buy, ordinary sell 4: Ordinary transaction (Normal Trade), floor buy, floor sell 5: Ordinary transaction (Normal Trade), floor buy, ceiling sell 6: Ordinary transaction (Normal Trade), ceiling buy, ordinary sell 7: Ordinary transaction (Normal Trade), ceiling buy, floor sell 10: Ordinary transaction (Normal Trade), ceiling buy, ceiling sell 11: Floor transaction (Down Limit Trade), ordinary buy, ordinary sell 12: Floor transaction (Down Limit Trade), ordinary buy, floor sell 13: Floor transaction (Down Limit Trade), ordinary buy, ceiling sell 14: Floor transaction (Down Limit Trade), floor buy, ordinary sell 15: Floor transaction (Down Limit Trade), floor buy, floor sell 16: Floor transaction (Down Limit Trade), floor buy, ceiling sell 17: Floor transaction (Down Limit Trade), ceiling buy, ordinary sell 20: Floor transaction (Down Limit Trade), ceiling buy, floor sell 21: Floor transaction (Down Limit Trade), ceiling buy, ceiling sell 22: Ceiling transaction (Up Limit Trade), ordinary buy, ordinary sell 23: Ceiling transaction (Up Limit Trade), ordinary buy, floor sell 24: Ceiling transaction (Up Limit Trade), ordinary buy, ceiling sell 25: Ceiling transaction (Up Limit Trade), floor buy, ordinary sell 26: Ceiling transaction (Up Limit Trade), floor buy, floor sell 27: Ceiling transaction (Up Limit Trade), floor buy, ceiling sell 30: Ceiling transaction (Up Limit Trade), ceiling buy, ordinary sell 31: Ceiling transaction (Up Limit Trade), ceiling buy, floor sell 32: Ceiling transaction (Up Limit Trade), ceiling buy, ceiling sell 33: Ordinary transaction (Normal Trade), odd-lot trade (1) (2) 34: Floor transaction (Down Limit Trade), odd-lot trade (1) (2) 35: Ceiling transaction (Up Limit Trade), odd-lot trade (1) (2) 40: Off-market trade (1) (2) (Supported on 916 & 915) 41: Auction trade during pre-open or closing auction.

BMLL Data Feed: Normalised Trades

XTAI	msg_original_type	6 - RealTimeAuctionQuotes 9 - TradingInformation 13 - OddLotTransactionInformation 23 - OddLotQuotes
XNZE	primary_trade_type	A - Regular Trade B - Block Trade D - Late Reported F - Privately Negotiated Trades G - Portfolio Trade H - Volume Weighted Average Trade I - Special J - International K - Put Through L - Late Trade M - Midpoint ' ' - Blank if no trade source