BMLL Data Feed

Reference - Prediction

Date: 2026-04-28
Version: 1.0

1.1. Introduction

The BMLL Data Feed: Prediction Reference provides a daily master file of reference data for every listed option contract in the BMLL universe. One row is produced per contract per day. This is the starting point for all options analysis: it defines the contract universe and carries the static attributes needed to interpret the time-series datasets.

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

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1.3. Schema

Field Name (Snowflake / Databricks)	Field Name (Parquet)	Type (Snowflake / Databricks)	Type (Parquet)	Description
MIC	MIC	VARCHAR	BYTE_ARRAY	The Market Identifier Code (MIC) is used to uniquely identify the exchange which is reporting market activity.
TICKER	Ticker	VARCHAR	BYTE_ARRAY	BMLL-format ticker for a listing on its trading venue. This is the customer-facing Ticker used in API, Snowflake, and Databricks materialisations.
LISTING_ID	ListingId	NUMBER	INT64	The BMLL ListingId is used to identify a specific instrument on a market venue (trading venue or reporting venue). BMLL listings identify uniquely every ticker on the venue and remain attached to the instrument even when a ticker change occurs — though changes of primary instrument identifier (such as ISIN changes) can cause a new listing_id to be issued.

Field Name (Snowflake / Databricks)	Field Name (Parquet)	Type (Snowflake / Databricks)	Type (Parquet)	Description
INSTRUMENT_ID	InstrumentId	NUMBER	INT64	The BMLL identifier of the BMLL instrument. BMLL instruments are designed to connect together listings of a designated underlying asset when they are issued with similar condition (i.e. same quoting currency, geographical, legislation region, primary reference venue).
DATE	Date	DATE	INT32	The date containing the data for which this file was produced
OPTION_TYPE	OptionType	VARCHAR	BYTE_ARRAY	Indicate whether the option is a put or a call.
STRIKE_PRICE	StrikePrice	FLOAT	DOUBLE	Strike Price of the Option
EXPIRY_DATE	ExpiryDate	DATE	INT32	Last trading date of the future
UNDERLYING_TICKER	UnderlyingTicker	VARCHAR	BYTE_ARRAY	Ticker of the underlying symbol
PRODUCT_CODE	ProductCode	VARCHAR	BYTE_ARRAY	Product Code as supplied by the exchange.
MATURITY_MONTH_YEAR	MaturityMonthYear	VARCHAR	BYTE_ARRAY	The month and year on which the Listing matures, in format YYYYMM.
MATURITY_DATE	MaturityDate	DATE	INT32	The date on which the Listing matures (i.e settles)

Field Name (Snowflake / Databricks)	Field Name (Parquet)	Type (Snowflake / Databricks)	Type (Parquet)	Description
CURRENCY_CODE	CurrencyCode	VARCHAR	BYTE_ARRAY	The currency code used for all price information (unless specified differently in specific column descriptions). The Currency code is represented following ISO-4217 codes (see https://en.wikipedia.org/wiki/ISO_4217) . Minor currencies are represented using the major currency code and putting in lower case the last letter of the major currency code.
CONTRACT_TYPE	ContractType	VARCHAR	BYTE_ARRAY	Normalised Type of the Listing. Mappings are provided per dataset. Can take values: - Outright - Spread - Inter Exchange - Inter Product Spread - Pack and Bundle - Strip - Butterfly -
EXCHANGE_CONTRACT_TYPE	ExchangeContractType	VARCHAR	BYTE_ARRAY	Exchange provided contract type.
IS_ALIVE	IsAlive	BOOLEAN	BOOLEAN	A symbol will remain alive as long as it is expected to be tradable.
IS_STRATEGY	IsStrategy	BOOLEAN	BOOLEAN	Boolean to indicate whether this contract is a strategy (e.g. calendar spread) or an outright order book. Equivalent to ContractType != "Outright"

Field Name (Snowflake / Databricks)	Field Name (Parquet)	Type (Snowflake / Databricks)	Type (Parquet)	Description
ASSET_CLASS	AssetClass	VARCHAR	BYTE_ARRAY	Normalised Type of the Listing. Mappings are provided per dataset. Mapping detail is provided in section 1.5
CFI	CFI	VARCHAR	BYTE_ARRAY	ISO 10962 Classification of Financial Instruments Code. Populated where provided from the exchange.
FIGI	FIGI	VARCHAR	BYTE_ARRAY	The Financial Instrument Global Identifier. See https://www.openfigi.com/ for more details
ISIN	ISIN	VARCHAR	BYTE_ARRAY	The International Securities Identification Numbering value unique for the instrument
INSTRUMENT_TYPE	InstrumentType	VARCHAR	BYTE_ARRAY	Type of instrument (Equity, Funds, Futures, Options)
MARKET_DATA_LEVEL	MarketDataLevel	VARCHAR	BYTE_ARRAY	
DESCRIPTION	Description	VARCHAR	BYTE_ARRAY	Long description of the instrument
DISPLAY_NAME	DisplayName	VARCHAR	BYTE_ARRAY	The name of the instrument
OPERATING_MIC	OperatingMIC	VARCHAR	BYTE_ARRAY	
LOADED_AT	LoadedAt	TIMESTAMP_NTZ	INT64	

1.4. Notes

One row per contract per reference date. The Ticker field contains the exchange-provided ticker for the contract. ListingId and InstrumentId are present when queried

via Snowflake (bmll.data.query / the PROD_L2_CBBO_DB.PUBLIC.VW_PREDICTION_REFERENCE view), but are reserved fields there and should not be relied upon for analytical purposes; they are absent entirely from the raw file and from bmll2.get_market_data(schema='Prediction', table_name='reference') (verified 2026-09-08 — see smell.prediction-reference.schema-differs-by-access-path). AssetClass AssetClass is derived from the CFI code (ISO 10962) where available. For venues where CFI codes are sparsely populated (e.g. Eurex options), additional normalisation logic may be applied. Consult per-venue documentation for clarification. ### ContractType ContractType is currently normalised to Outright or Spread. Finer-grained strategy classifications (e.g. straddle, strangle) are carried in ExchangeContractType.

1.5. Option Contract Identification

Options are identified by a composite key built from several fields that together uniquely identify a single tradeable contract. This key links records across all Options Data Feed files.

Level	Fields	What It Defines
Venue	MIC	The exchange (e.g. XEUR, XCME)
Product	MIC + UnderlyingTicker	All options on a given underlying
Expiry group	MIC + UnderlyingTicker + ExpiryDate	All strikes and option types for one expiry
Contract	MIC + UnderlyingTicker + ExpiryDate + StrikePrice + OptionType	A single tradeable option contract