

# Marubozu Thrust Breakout

Expert Advisor Documentation

## PLATFORM

MetaTrader 5 (MT5)

## TYPE

Price-Action Momentum Breakout

## TIMEFRAME

H1 (recommended)

## WEBSITE

[www.algotbot.live](http://www.algotbot.live)

**⚠ Important Disclaimer** This document is for educational and informational purposes only. It does not constitute financial or investment advice. Trading forex, CFDs, and other leveraged instruments involves substantial risk of loss and is not suitable for all investors. Past backtest performance does not guarantee future results. Never trade with capital you cannot afford to lose.

## Overview

Marubozu Thrust Breakout is a **pure price-action** Expert Advisor that trades momentum breakouts using nothing but raw OHLC data — no moving averages, no RSI, no ATR, no indicators of any kind. Every decision is derived directly from the shape of the candles and the recent swing structure.

The strategy is built on a single, intuitive idea: a genuine momentum impulse reveals itself as a *thrust candle* — a marubozu-like bar with a large body, tiny wicks, and a range that expands sharply versus recent activity. A big candle on its own, however, is just noise. It only becomes a tradable signal when it **also closes beyond a recent swing high or low**, turning raw expansion into a structural breakout. The EA enters in the direction of the thrust and lets the candle itself define risk: the protective stop is placed just beyond the candle's opposite extreme, and the target is a fixed multiple of that risk.

## How It Works

On every newly-closed bar the EA evaluates the just-closed candle (the candidate "thrust") against three sequential filters. All three must pass before a trade is considered, and only one position per magic number is allowed open at a time.

## 1. The Thrust Candle — body dominance

The candle's body must dominate its total range. The EA computes the body-to-range ratio and rejects anything that is not "marubozu enough":

```
range      = High - Low
body       = |Close - Open|
bodyRatio  = body / range           // must be ≥ ThrustBodyRatio (default 0.65)
```

A high ratio means small wicks and a decisive close — the hallmark of a one-sided, committed candle.

## 2. Range Expansion — momentum baseline

The thrust must stand out against recent volatility. The EA averages the range of the `AvgRangePeriod` bars *behind* the thrust and requires the thrust range to exceed that average by the `RangeExpansion` factor:

```
avgRange = mean(High - Low over the previous AvgRangePeriod bars)
require:  range ≥ RangeExpansion × avgRange    // default 1.60×
```

This filters out ordinary candles and isolates true expansion / impulse moves.

## 3. The Breakout Filter — structure

The EA scans the `StructureLookback` bars behind the thrust to find the swing high (resistance) and swing low (support). The thrust must **close beyond** that level for the breakout to be valid:

- **Long setup:** a *bullish* thrust whose close is above the recent resistance (swing high).
- **Short setup:** a *bearish* thrust whose close is below the recent support (swing low).

### Entry Logic

When all three filters align, the EA enters immediately at market in the direction of the thrust — buying at the Ask for longs, selling at the Bid for shorts — at the position size set by `Lots`.

### Exit Logic — candle-defined risk

Risk is anchored to the thrust candle itself. The stop sits just beyond the candle's opposite extreme, padded by a buffer that is a fraction of the candle's range, and the take-profit is a fixed reward-to-risk multiple of that stop distance:

$buffer = StopBufferPct \times range$

LONG :  $SL = thrustLow - buffer$   
 $risk = entry - SL$   
 $TP = entry + RewardRisk \times risk$

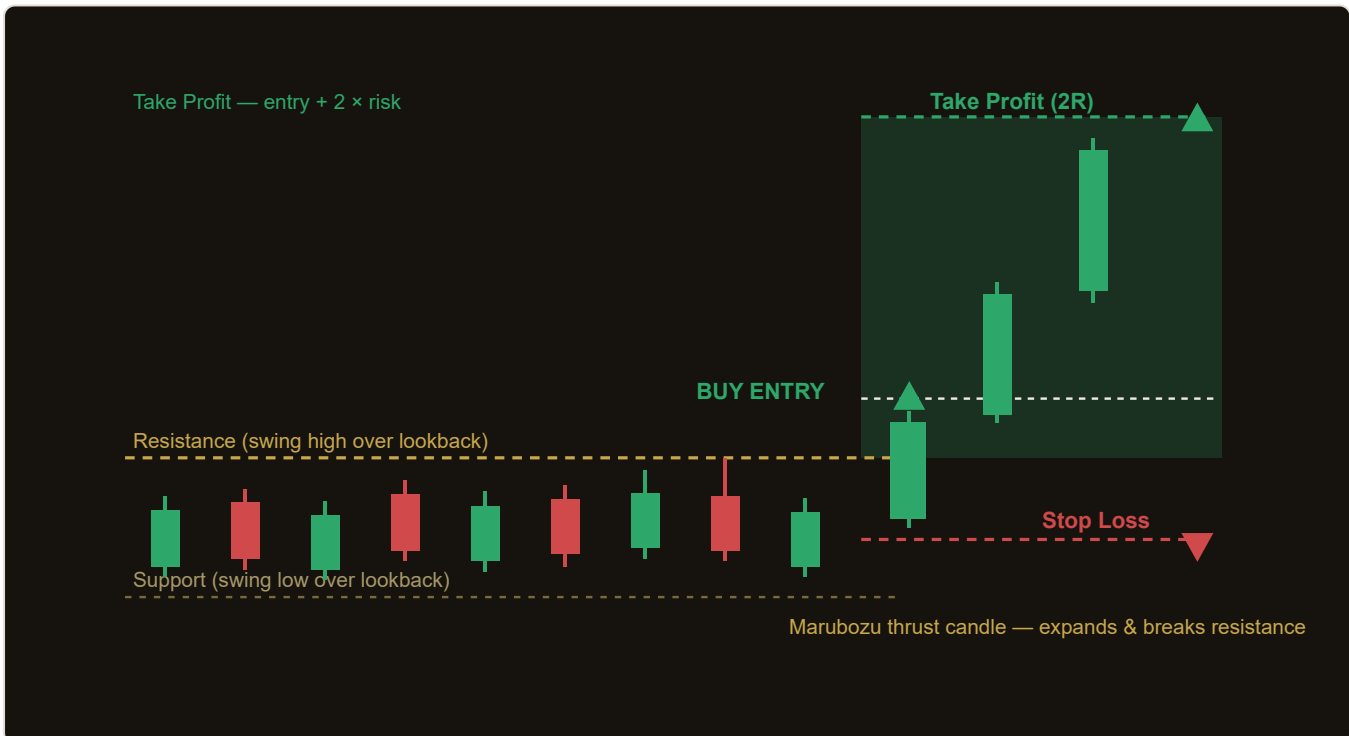
SHORT:  $SL = thrustHigh + buffer$   
 $risk = SL - entry$   
 $TP = entry - RewardRisk \times risk$

Both stop and target are set the moment the order is sent; the position is then left to resolve at one of the two levels. There is no trailing stop and no time-based exit.

**Note:** The EA acts strictly *once per closed bar*. The forming bar (shift 0) is ignored; the candle evaluated is always the one that has just fully closed (shift 1). This avoids acting on incomplete, still-changing price data.

## Strategy in Action

The illustration below shows an example of how the strategy identifies a setup and triggers its entry and exit. This is a simplified, illustrative example for educational purposes — not real market data.



*Illustrative example only. Actual market behaviour varies.*

### Reading the chart

Price consolidates under a resistance level (the swing high of the lookback window). A bullish marubozu then prints — its range is far larger than the recent average and its close pushes above resistance. That is the thrust + breakout. The EA buys at the open of the next bar, places the stop just below the thrust candle's low (minus the buffer), and sets the target at twice the risk distance. Price continues higher and resolves at the take-profit.

## Parameters

Parameter	Default	Description
ThrustBodyRatio	0.65	Minimum body-to-range ratio for a candle to qualify as a marubozu thrust. Higher = stricter (smaller wicks). Range 0.50–0.90, step 0.05.
RangeExpansion	1.60	The thrust range must exceed the average recent range by at least this factor — the momentum / expansion filter. Range 1.10–3.00, step 0.10.
StructureLookback	12	Number of bars behind the thrust scanned for the swing high/low that defines the breakout level. Range 5–40, step 1.
AvgRangePeriod	14	Number of bars used to compute the average candle range (the volatility baseline for the expansion test). Range 5–30, step 1.
StopBufferPct	0.20	Extra stop distance beyond the thrust candle's extreme, expressed as a fraction of the candle's range. Range 0.00–1.00, step 0.05.
RewardRisk	2.00	Take-profit distance as a multiple of the entry-to-stop risk. A value of 2.00 targets twice the risk. Range 1.00–4.00, step 0.25.
Lots	0.10	Fixed position size in lots for each trade. Range 0.01–1.00, step 0.05.
Magic	1001	Unique magic number identifying this EA's positions, so it manages only its own trades on the symbol.

## Recommended Settings

Because the strategy reads volatility expansion and swing structure directly off the candles, it works best on timeframes where individual bars carry meaningful momentum and clean breakouts form. The defaults are a balanced starting point.

- **Timeframe:** H1 is the recommended baseline. M15–H4 are reasonable to explore; very low timeframes tend to produce more false thrusts.

- **Instruments:** trending, liquid markets — major FX pairs and major indices — where breakouts follow through more reliably.
- **Body / expansion filters:** keep `ThrustBodyRatio`  $\geq 0.65$  and `RangeExpansion`  $\geq 1.6$  for quality over quantity. Lowering them increases trade frequency but admits weaker signals.
- **Risk:** a `RewardRisk` of 2.00 with a small `StopBufferPct` (0.15–0.25) is a sensible default. Set `Lots` conservatively relative to account size.

**Tip:** Always validate any parameter combination in the MT5 Strategy Tester on your specific broker's data before considering live use. Spread and execution conditions vary between brokers and directly affect a breakout strategy's results.

## How to Install on MetaTrader 5

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- 1 Copy `MarubozuThrustBreakout.ex5` to your MT5 `MQL5\Experts\` folder
- 2 Restart MetaTrader 5 and refresh the Navigator panel
- 3 Drag the EA onto a chart matching the recommended symbol and timeframe
- 4 Configure the input parameters and click **OK**
- 5 Enable **Algo Trading** in the MT5 toolbar

## Risk Warning

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