

# Momentum Pocket Pullback

Expert Advisor Documentation

## PLATFORM

MetaTrader 5 (MT5)

## TYPE

Momentum Continuation (Price Action)

## TIMEFRAME

M15 / H1

## 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

**Momentum Pocket Pullback** is a pure price-action, momentum-continuation Expert Advisor. It uses **no indicators of any kind** — every value it relies on (impulse displacement, average candle range, retracement depth, and swing-based stops) is computed directly from raw OHLC bars.

The core idea is simple: strong directional momentum tends to *resume* after a brief, shallow rest. The EA first looks for an **impulse leg** — a run of same-direction candles whose net travel is large relative to recent average range. It then waits for a **pocket** — a shallow, short-lived pullback that pauses inside the leg without erasing it. When the very next candle breaks the pocket's extreme in the original direction with a body to match, the EA presumes momentum is continuing and enters with a swing-anchored stop and a fixed reward-to-risk target.

The strategy works on a per-closed-bar basis, holds only one position at a time per magic number, and manages every trade entirely through its attached stop-loss and take-profit levels.

# How It Works

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## 1. Bar-by-bar evaluation

The EA evaluates the market only once per newly-closed candle. The still-forming bar (shift 0) is monitored; when its open-time advances, the bar at shift 1 has just closed and becomes the **breakout / trigger candle**. This keeps signals based on completed price action rather than intrabar noise.

## 2. The average-range yardstick

Before measuring momentum, the EA computes an **average candle range** over the most recent `RangeWindow` closed bars (high minus low, averaged). This becomes the yardstick against which an impulse is judged — it adapts the strategy to the instrument's current volatility instead of using a fixed pip threshold.

## 3. Detecting the impulse leg

Working back from the breakout candle, the EA inspects a block of `ImpulseBars` candles and measures the net displacement from the leg's starting open to its ending close. The leg qualifies as a genuine impulse only when:

- The net move is at least `MinImpulseMult` × the average range (the impulse is decisively larger than normal candles), and
- At least 60% of the leg's candles close in the impulse direction ( `ceil(ImpulseBars × 0.6)` ), confirming a one-sided, trending run.

## 4. Finding the pocket (shallow pullback)

Immediately after the impulse, the EA scans for a **pocket** — a pullback of up to `PullbackMaxBars` candles. It always tries the shortest valid pocket first (the freshest continuation). The pocket is valid only if it stays inside the leg and does not retrace too deeply:

- The pocket must **not extend the leg** (its extreme does not push past the impulse high for longs, or below the impulse low for shorts).
- The pullback may retrace **at most** `RetraceMax` of the impulse range — a shallow dip, not a reversal.

**Why "pocket"?** A healthy continuation pauses in a tight, shallow zone that sits high inside an up-leg (or low inside a down-leg). That compact resting area is the "pocket" the breakout candle is expected to launch out of.

## 5. The breakout trigger and entry

The most recently closed candle (shift 1) is the trigger. A trade is taken only when it breaks the pocket's extreme in the impulse direction *and* closes with a body in that direction:

- **Long continuation:** a strong up-impulse, a shallow dip that holds, then a candle that closes *above* the pocket high with an up-body. Entry is placed at the current **Ask**.
- **Short continuation:** a strong down-impulse, a shallow bounce that holds, then a candle that closes *below* the pocket low with a down-body. Entry is placed at the current **Bid**.

## 6. Stop-loss and take-profit

Every trade carries a fixed, pre-calculated stop and target:

- **Stop loss** is anchored to the pocket's swing extreme, padded by a buffer of `StopBufferFrac` × the impulse range. For longs the stop sits below the pocket low; for shorts it sits above the pocket high.
- **Take profit** is set at `RewardRisk` × the measured stop distance, giving a consistent reward-to-risk ratio on every trade.

```
risk = |entry - stop|  
take_profit = entry ± (RewardRisk × risk) // + for longs, - for shorts
```

## 7. Position management

The EA holds **one position at a time** for its magic number and does not stack or scale. Once open, the position is left entirely to its stop-loss and take-profit to manage the exit — there is no trailing logic or discretionary close.

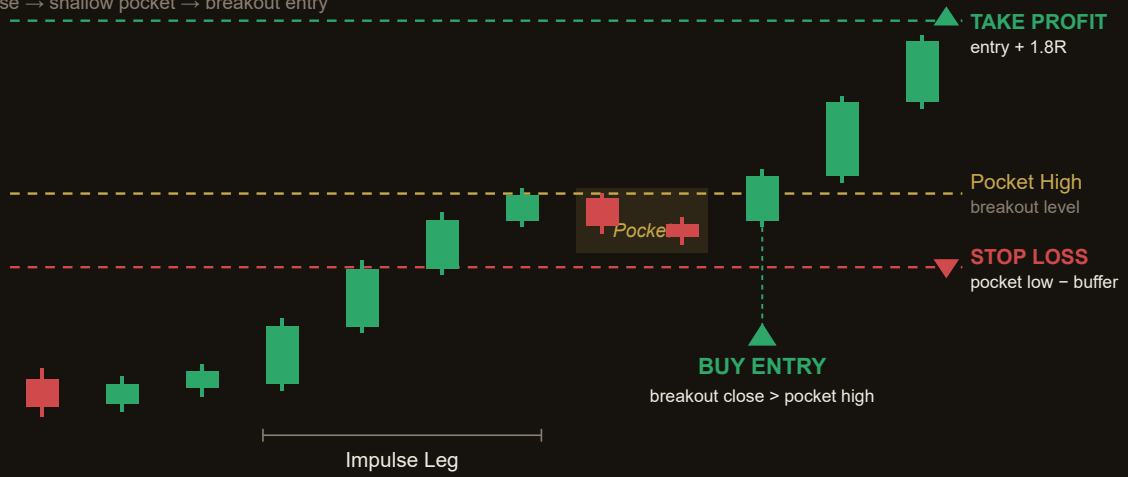
## Strategy in Action

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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.

## Long Continuation Setup

Impulse → shallow pocket → breakout entry



Risk : Reward = 1 : 1.8 (RewardRisk = 1.8)

*Illustrative example only. Actual market behaviour varies.*

## Parameters

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Parameter	Default	Description
ImpulseBars	4	Number of candles that must form the momentum impulse leg. Range 3–8, step 1.
PullbackMaxBars	3	Maximum length (in candles) of the shallow pullback “pocket”. The EA tries the shortest valid pocket first. Range 1–5, step 1.
RangeWindow	14	Window (bars) used to compute the average candle range yardstick. Range 8–30, step 2.
MinImpulseMult	2.5	Impulse net displacement must be at least this multiple of the average range to qualify. Range 1.0–5.0, step 0.5.
RetraceMax	0.6	The pullback may retrace at most this fraction of the impulse range (shallow dip only). Range 0.3–0.8, step 0.1.
StopBufferFrac	0.25	Stop-loss buffer beyond the pocket extreme, as a fraction of the impulse range. Range 0.05–0.6, step 0.05.
RewardRisk	1.8	Take-profit distance as a multiple of the stop risk (reward-to-risk ratio). Range 1.0–3.5, step 0.1.
Lots	0.10	Fixed position size in lots. Range 0.01–1.0, step 0.05.
Magic	1001	Magic number identifying this EA’s positions, so it manages only its own trades.

## Recommended Settings

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The default parameters are a balanced starting point suited to liquid FX majors on the **M15** or **H1** timeframes, where clean impulse-and-rest structure is common. As always, validate on your own symbol, broker, and account before going live.

### Balanced (default)

ImpulseBars 4 · PullbackMaxBars 3 · RangeWindow 14 · MinImpulseMult 2.5 · RetraceMax 0.6 · StopBufferFrac 0.25 · RewardRisk 1.8 · Lots 0.10. A good all-round configuration for M15/H1 majors.

### Selective / higher-quality (fewer trades)

Raise `MinImpulseMult` to 3.0–3.5 and lower `RetraceMax` to 0.4–0.5. This demands stronger impulses and shallower pockets, filtering out weaker continuations at the cost of trade frequency.

### More responsive (more trades)

Lower `MinImpulseMult` to ~2.0 and allow a slightly longer pocket with `PullbackMaxBars` 4–5. Expect more signals and more noise — pair with a wider `StopBufferFrac` if stops are getting clipped.

**Tuning tips.** `RangeWindow` sets how quickly the volatility yardstick adapts — a smaller window reacts faster to changing conditions, a larger one is steadier. `RewardRisk` directly shapes the win-rate-vs-payoff trade-off: higher targets win less often but pay more per win. Always re-optimize `StopBufferFrac` alongside the spread and typical wick size of your instrument.

**Position sizing.** `Lots` is a fixed lot size and does *not* auto-scale to account equity. Set it in proportion to your balance and risk tolerance, and confirm the resulting per-trade risk (stop distance × lot value) is acceptable before trading live.

## How to Install on MetaTrader 5

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- 1 Copy `MomentumPocketPullback.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

**Tip.** Run the strategy in the MT5 **Strategy Tester** first to confirm behaviour and to optimize the parameters against your chosen symbol and timeframe before attaching it to a live or demo chart.

## Risk Warning

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