

# FVG Momentum Pullback

Expert Advisor Documentation

## PLATFORM

MetaTrader 5 (MT5)

## TYPE

Momentum Continuation

## 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

**FVG Momentum Pullback** is a two-idea **continuation** strategy that pairs a price-structure signal — the **Fair Value Gap (FVG)** — with a momentum read taken from the **RSI**. It trades in the direction of a recent, one-sided thrust, but never chases that thrust. Instead it waits for price to *pull back into the imbalance* the thrust left behind, and only commits while RSI confirms the trend's momentum regime is still intact.

The logic rests on two independent filters that must agree before a single order is sent. Price structure says **where** a high-quality entry lives (inside the gap); momentum says **whether** the move that created it is still healthy. Requiring both is what screens out the false pullbacks that run plain “buy-the-dip” continuation traders over.

Because every threshold scales to a plain mean candle range or to ATR, the EA carries no hard-coded point or pip math. It adapts to whatever symbol and timeframe it is attached to, making it well suited to trend-prone, liquid instruments such as EUR/USD, GBP/USD, XAU/USD and major indices.

**What is a Fair Value Gap?** An FVG is the three-candle fingerprint of an efficient move. A dominant *displacement* candle travels so fast that the wick of candle #1 and the wick of candle #3 never overlap, leaving an untraded pocket of price. That pocket behaves like fresh demand (bullish gap) or fresh supply (bearish gap) — price routinely revisits it once before the original direction resumes.

# How It Works

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## The two pillars

- **The imbalance (where).** The EA continuously scans the three most-recently-closed candles for a fresh FVG. A real gap must be left by a genuine thrust — the middle candle has to be body-dominant and directional — and it must be wide enough to matter relative to recent volatility.
- **The momentum gate (whether).** RSI is the regime filter. A bullish gap is traded only while RSI still holds the bullish half of its range ( $\geq \text{TrendLevel}$ ); a bearish gap only while RSI holds the bearish half ( $\leq 100 - \text{TrendLevel}$ ). This prevents buying the dip into a gap that was the last gasp of a dying trend.

## Detecting the imbalance

On every new bar the strategy re-evaluates the freshly-closed trio of candles (oldest, middle/displacement, newest). A **bullish FVG** is registered when all of the following hold:

- **Up imbalance:**  $\text{High}(\text{oldest}) < \text{Low}(\text{newest})$  — the wicks do not overlap.
- **Real thrust:** the middle candle is bullish ( $\text{Close} > \text{Open}$ ) and body-dominant ( $\text{body} / \text{range} \geq \text{BodyDominance}$ ).
- **Meaningful size:** the gap height  $\text{Low}(\text{newest}) - \text{High}(\text{oldest})$  is at least  $\text{MinGapFrac} \times$  the average candle range over the last  $\text{RangeWindow}$  bars.

The **bearish FVG** is the exact mirror: a down imbalance ( $\text{Low}(\text{oldest}) > \text{High}(\text{newest})$ ), a bearish body-dominant displacement candle, and a gap of at least the same minimum size. The gap pocket is then stored as a numeric  $[\text{low} \dots \text{high}]$  band, direction-independent.

## Entry logic

Only the single most-recent imbalance is tracked, and it must age at least one closed bar before it can be traded (a pullback, not the formation bar itself). On each tick the EA checks for a fresh tap of the gap:

- **Bullish gap** → **BUY**. When the **Ask** retraces down into the band  $[\text{oldest.High} \dots \text{newest.Low}]$  and  $\text{RSI} \geq \text{TrendLevel}$ , a market buy is sent.
- **Bearish gap** → **SELL**. When the **Bid** retraces up into the band  $[\text{newest.High} \dots \text{oldest.Low}]$  and  $\text{RSI} \leq 100 - \text{TrendLevel}$ , a market sell is sent.

Two further guards apply before any order: there must be no existing position for this **Magic**, and the current spread must not exceed **MaxSpreadPoints**. Each imbalance is traded **at most once** — it is deactivated the moment its order is placed.

## Stops & targets

The stop is structural, anchored to the gap's base and cushioned by volatility:

```
buffer = SIAtrMult × ATR(ATrPeriod)
```

```
BUY : SL = oldest.High - buffer  
      risk = Ask - SL  
      TP = Ask + RewardRisk × risk
```

```
SELL: SL = oldest.Low + buffer  
      risk = SL - Bid  
      TP = Bid - RewardRisk × risk
```

The take-profit is always a fixed multiple ( `RewardRisk` ) of the measured stop distance, so the reward-to-risk ratio is consistent regardless of how wide the gap or how volatile the instrument.

## Position management & invalidation

The EA holds **one position per Magic** at a time and tracks only the latest imbalance. If no pullback occurs, that imbalance is retired when any of these happen:

- **Base broken:** a bar *closes* through the gap's far edge (a bullish gap fails on a close below its low; a bearish gap fails on a close above its high).
- **Stale:** more than `ExpiryBars` closed bars pass without the gap being tapped.
- **Traded:** the pullback fires and the order is sent — the gap is consumed.

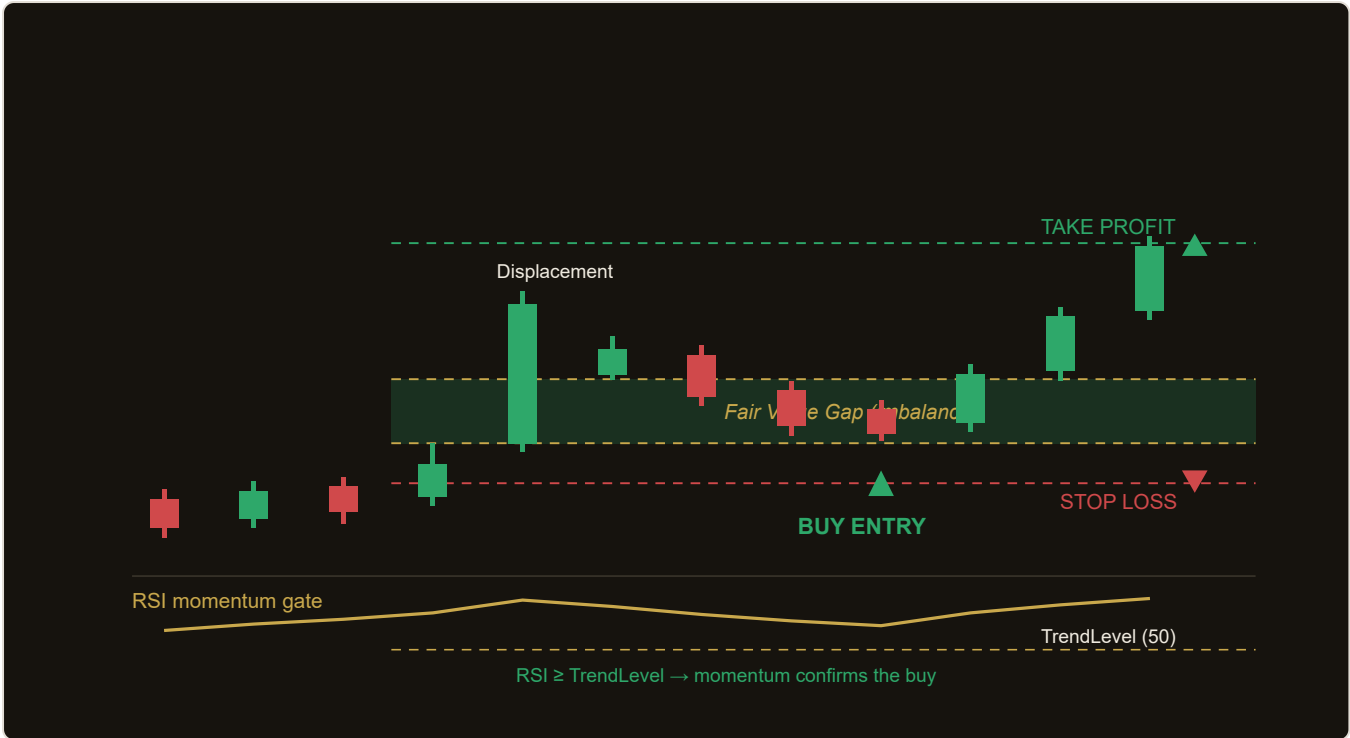
### Worked example — bullish pullback

A strong bullish displacement candle prints on EUR/USD M15, leaving an untraded gap between the prior candle's high (1.08420) and the next candle's low (1.08470). Three bars later price drifts back down and the Ask re-enters the 1.08420–1.08470 pocket while RSI reads 56 (above a `TrendLevel1` of 50). The EA buys at 1.08440. With `ATR` = 0.00120 and `SIAtrMult` = 0.50, the buffer is 0.00060, so `SL` = 1.08420 – 0.00060 = 1.08360 (risk = 0.00080). At `RewardRisk` = 1.80 the `TP` is 1.08440 + 0.00144 = 1.08584.

## 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.



*Illustrative example only. Actual market behaviour varies.*

## Parameters

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Parameter	Default	Description
RsiPeriod	14	RSI smoothing period — the momentum gate. Range 7–28.
TrendLevel	50.0	Momentum regime line. Bullish pullbacks require $RSI \geq$ this; bearish pullbacks require $RSI \leq 100 -$ this. Range 40–60.
AtrPeriod	14	ATR period used to size the structural stop buffer. Range 7–28.
MinGapFrac	0.25	Minimum gap height as a fraction of the average candle range — defines a meaningful imbalance. Range 0.05–1.50.
BodyDominance	0.55	Displacement candle body / range — how one-sided the thrust must be. Range 0.30–0.90.
SIatrMult	0.50	Stop buffer beyond the gap's far edge, expressed in ATR multiples. Range 0.00–2.00.
RewardRisk	1.80	Take-profit distance as a multiple of the structural stop distance. Range 0.80–4.00.
ExpiryBars	15	Abandon an untouched imbalance after this many closed bars. Range 3–60.
RangeWindow	20	Lookback for the mean candle range that scales the gap-size filter. Range 8–60.
MaxSpreadPoints	30	Skip the trade if the current spread (in points) is wider than this. Range 1–200.
Lots	0.10	Fixed trade volume in lots. Range 0.01–1.00.
Magic	9273	Magic number identifying this EA's positions. Range 0–9,999,999.

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## Recommended Settings

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The strategy is built for trend-prone, liquid instruments and is naturally at home on intraday timeframes where displacement and pullback structure is clean.

- **Instruments:** EUR/USD, GBP/USD, XAU/USD (Gold), and major indices.
- **Timeframes:** M15 to H1 — the sweet spot for readable Fair Value Gaps.
- **Momentum gate:** keep `TrendLevel` near 50 for balanced continuation; raise it toward 55–60 to demand stronger trend confirmation (fewer, higher-conviction trades).
- **Gap quality:** increase `MinGapFrac` and `BodyDominance` to trade only the most decisive thrusts; lower them for more frequent setups on quieter markets.

- **Spread guard:** set `MaxSpreadPoints` to suit your broker — tighter on majors, wider on Gold and indices.

**Tuning tip:** because all thresholds scale to ATR and mean candle range, the defaults transfer reasonably across symbols. When porting to a new instrument, always re-run the Strategy Tester over recent history and confirm the gap-size and body-dominance filters still produce a sensible number of setups before going live.

**⚠ Backtest first** Always validate any parameter set in the MT5 Strategy Tester on quality historical data before risking real capital. Fixed-lot sizing does not scale risk to account equity — size positions deliberately for your own risk tolerance.

## How to Install on MetaTrader 5

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- 1 Copy `FVGMomentumPullback.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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