

Gap Fill Fade Reversal

Expert Advisor Documentation

PLATFORM

MetaTrader 5 (MT5)

TYPE

Mean Reversion (Gap Fade)

TIMEFRAME

H1 – D1

WEBSITE

www.algotbot.live

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Overview

Gap Fill Fade Reversal is a pure price-action Expert Advisor that fades emotional price gaps. When a bar opens with a meaningful gap away from the previous bar's close — the kind of jump driven by news, a session open, or a sudden burst of liquidity — price very often snaps back to “fill” that empty space before continuing. This EA trades *against* the gap, targeting the pre-gap close.

Critically, it does not blindly catch a falling (or rising) knife. It waits for the gap bar itself to print a **rejection close** — a candle that closes back *toward* the gap, against the direction it jumped. That single price-action tell is the signal that the initial impulse is already being absorbed, and it is what separates this approach from naive gap-catching.

The strategy uses **no indicators** — no moving averages, RSI, ATR, or similar. Its only volatility yardstick is the average bar range over a configurable lookback window, computed inline directly from price. This keeps the logic transparent, fast, and free of indicator-handle overhead.

In one sentence: when price gaps hard and then immediately rejects, the EA fades the move with a market order and aims for the gap to fill back to the prior close — protected by a stop just beyond the gap bar's extreme.

How It Works

The EA works on a single timeframe and evaluates only freshly completed bars. On each newly closed bar it inspects a two-bar window: the **prior bar (P)**, whose close defines the gap origin, and the **gap bar (G)**, the bar that just closed.

1. The volatility yardstick

Before measuring any gap, the EA computes the **average bar range** (High – Low) over the `RangeLookback` bars taken *before* the gap bar. This adaptive yardstick scales the strategy to the instrument's current volatility — no fixed pip distances are hard-coded.

```
avgRange = average( High - Low ) over RangeLookback bars before the gap
threshold = GapMultiple × avgRange
```

2. Gap detection & rejection confirmation

The gap is measured as `G.Open - P.Close`. A valid setup requires both a gap of sufficient size *and* a rejection close in the opposite direction:

- **Gap Down → fade LONG:** `G.Open ≤ P.Close - threshold` *and* the gap bar closes bullish (`G.Close > G.Open`). Price jumped down, then closed back up — absorption.
- **Gap Up → fade SHORT:** `G.Open ≥ P.Close + threshold` *and* the gap bar closes bearish (`G.Close < G.Open`). Price jumped up, then closed back down — absorption.

3. Entry

On confirmation, the EA submits a **market order** at the open of the new bar — a `Buy` at the Ask for a faded gap-down, or a `Sell` at the Bid for a faded gap-up.

4. Exit — Take Profit & Stop Loss

Both protective levels are attached to the order at entry:

- **Take Profit** targets the gap-fill level. With `TargetFraction = 1.00` the target is the full pre-gap close (`P.Close`); lower values aim for a more conservative *partial* fill, which tends to be more reliable than the last tick of a gap.
- **Stop Loss** sits just beyond the gap bar's far extreme — below `G.Low` for longs, above `G.High` for shorts — buffered by `StopBuffer × avgRange`.

```

// Gap-down fade (LONG)
entry = Ask
tp    = G.Open + TargetFraction × (P.Close - G.Open)
sl    = G.Low  - StopBuffer    × avgRange

// Gap-up fade (SHORT)
entry = Bid
tp    = G.Open - TargetFraction × (G.Open - P.Close)
sl    = G.High + StopBuffer    × avgRange

```

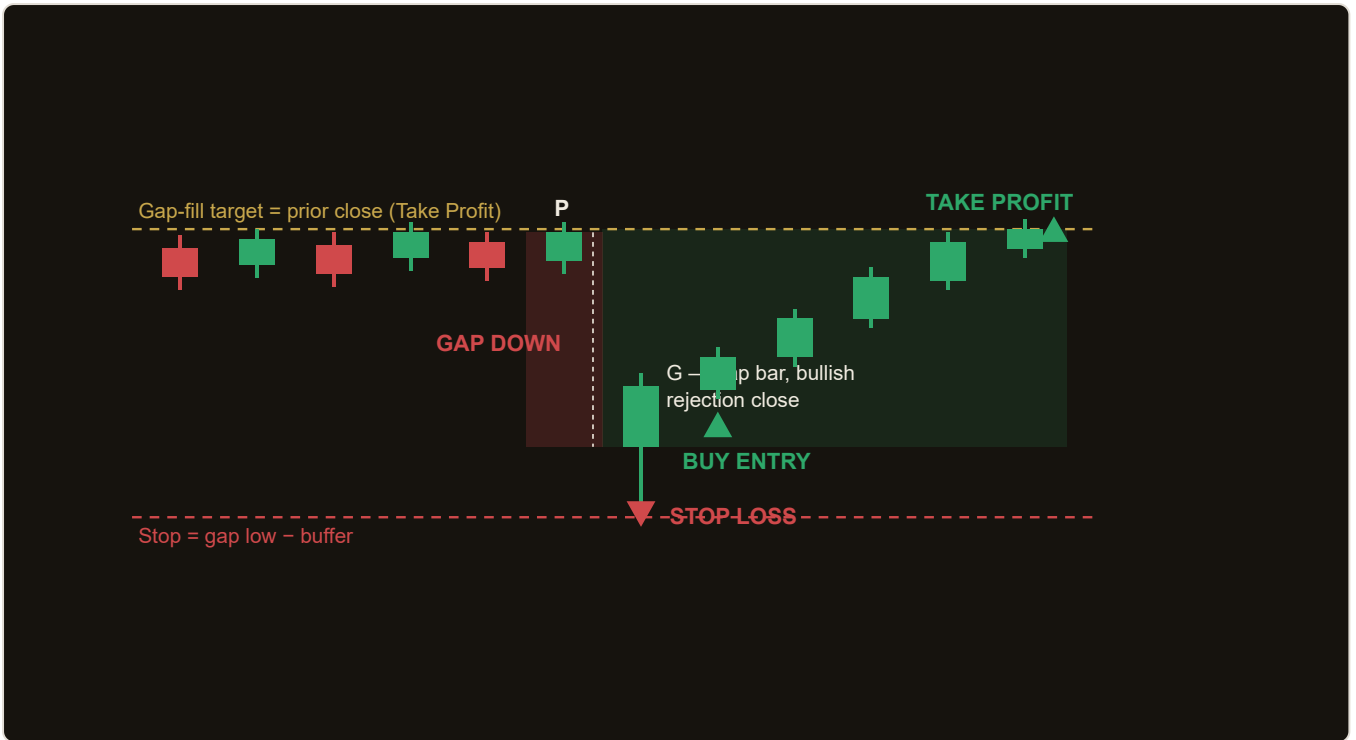
5. Trade hygiene

- **One position at a time** — a new trade is only considered when no position (matching the magic number) is open; the SL/TP resolves the current trade.
- **Bar-close only** — the logic runs once per freshly completed bar, never intrabar.
- **Geometry sanity check** — every candidate entry is validated so the SL and TP sit on the correct side of price; if the geometry doesn't make sense, the trade is skipped.

Why it's different: this is *mean reversion*, not a continuation gap play. It fades the jump back to its origin using a confirmation candle, rather than chasing the breakout in the gap's direction.

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.

Parameters

All inputs are exposed in the MT5 "Inputs" tab. Defaults below match the strategy definition.

Parameter	Default	Description
Lots	0.10	Fixed trade volume in lots for each position. Range 0.01 – 1.00, step 0.01.
GapMultiple	1.00	Gap size required to trigger a fade, expressed as a multiple of the average bar range. Higher values demand larger, rarer gaps. Range 0.30 – 4.00, step 0.10.
RangeLookback	20	Number of bars (before the gap bar) used to compute the average bar range yardstick. Range 5 – 60, step 1.
TargetFraction	1.00	Fraction of the gap to target for take profit. 1.00 aims for the full pre-gap close; lower values take a partial, more reliable fill. Range 0.40 – 1.00, step 0.05.
StopBuffer	0.50	Stop-loss buffer beyond the gap bar's extreme, as a multiple of the average bar range. Range 0.10 – 2.00, step 0.10.
Magic	1001	Unique magic number identifying this EA's orders, so it manages only its own positions on the symbol.

Example — reading a gap-down fade

Suppose the average bar range is 30 pips and `GapMultiple = 1.00`, so the threshold is 30 pips. If the prior bar closed at 1.10500 and the next bar opens at 1.10150 (a 35-pip gap down) *and* that gap bar closes bullish, the EA buys at the Ask. With `TargetFraction = 1.00` it targets 1.10500 (the prior close); the stop sits below the gap bar's low minus $0.50 \times 30 = 15$ pips.

Recommended Settings

Gaps are most meaningful where they occur naturally — session opens, the weekly Monday open, and post-news jumps. The adaptive range yardstick lets the EA scale to any instrument, but it shines on timeframes where gap behaviour is genuine rather than micro noise.

- **Timeframe:** `H1` to `D1`. Daily captures classic overnight / weekend gaps; H1–H4 capture session-open and news gaps.
- **Instruments:** major FX pairs and indices that exhibit clean opening gaps. Avoid thin, erratically gapping symbols where fills rarely complete.
- **GapMultiple:** keep at `1.00` for a balanced filter; raise toward `1.5–2.0` to trade only large, high-conviction gaps.
- **TargetFraction:** start at `1.00`; lower to `0.70–0.85` if full fills are missing and partial targets improve your hit rate.
- **StopBuffer:** `0.50` is a sensible default; widen if normal noise is stopping you out at the gap extreme.

Tip: always validate on the MT5 Strategy Tester with quality history before going live. Optimise `GapMultiple`, `TargetFraction`, and `StopBuffer` together — they jointly define the risk-to-reward geometry of every trade.

Note on gap continuation: not every gap fills. A strong, news-driven gap can keep running in its original direction. The rejection-close confirmation reduces — but does not eliminate — this risk, which is exactly why the stop beyond the gap extreme is non-negotiable.

How to Install on MetaTrader 5

- 1 Copy `GapFillFadeReversal.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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