

Range Position Pullback

Expert Advisor Documentation

PLATFORM

MetaTrader 5 (MT5)

TYPE

Trend-Following Pullback

TIMEFRAME

Any (H1 recommended)

WEBSITE

www.algotbot.live

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Overview

Range Position Pullback is a trend-following Expert Advisor that enters continuation trades after a healthy counter-trend pullback has exhausted. Rather than chasing momentum, it waits for an established trend to "breathe" and then joins the move as price resumes with the trend.

The timing engine is a self-computed *range position* oscillator — a 0–100 reading of where the latest close sits inside the recent High/Low channel:

$$\text{pos} = (\text{Close} - \text{LowestLow}) / (\text{HighestHigh} - \text{LowestLow}) \times 100$$

- **0** — close pinned at the *bottom* of the recent range (a deep pullback within an uptrend).
- **100** — close pinned at the *top* of the recent range (a deep pullback within a downtrend).

Trades are only taken **with** a dual-EMA trend and only on the bar where the oscillator climbs back *out* of a pullback zone with a confirming candle body. Every position is protected by an ATR-anchored stop, an R-multiple take-profit, and a two-stage trade manager. The EA operates on a single, freely chosen timeframe — the timeframe is decided when you attach the EA, not fixed in code.

The edge in one line. Requiring the "dip then reclaim" transition — not merely an extreme reading — filters out weak counter-trend chop and late chases, so entries occur precisely as a pullback is failing and the trend is resuming.

How It Works

1. Trend filter (dual EMA + price gate)

A fast and a slow EMA define the trend, and the slow EMA doubles as a price-location gate. Signals are evaluated only when trend and price agree:

- **Uptrend:** $\text{FastEMA} > \text{SlowEMA}$ and the close is above the slow EMA.
- **Downtrend:** $\text{FastEMA} < \text{SlowEMA}$ and the close is below the slow EMA.

2. Pullback zone & the reclaim trigger

The `EntryZone` parameter (default 25) defines symmetric pullback bands on the 0–100 scale. The EA does not enter on an extreme reading; it enters on the *transition* back out of the zone:

- **Long reclaim:** the prior bar's range position was at or below `EntryZone`, and the current bar's reading has climbed back above it ($\text{prevPos} \leq \text{EntryZone} \ \&\& \ \text{curPos} > \text{EntryZone}$).
- **Short reclaim:** the prior bar's reading was at or above $100 - \text{EntryZone}$, and the current bar has dropped back below it.

3. Candle confirmation & entry

On the reclaim bar, one final filter must pass — the confirmation candle body must point with the trade:

- **Long:** uptrend + long reclaim + a bullish confirmation candle ($\text{Close} > \text{Open}$) → buy at the Ask.
- **Short:** downtrend + short reclaim + a bearish confirmation candle ($\text{Close} < \text{Open}$) → sell at the Bid.

The EA holds only **one position at a time** per magic number; while a trade is open, no new entries are considered and the exit is driven entirely by the stop, target, and trailing logic.

4. Exits & risk management

Every trade is bracketed at entry and then actively managed:

- **Initial stop:** $\text{StopAtrMult} \times \text{ATR}$ away from entry (default $2 \times \text{ATR}$). This distance defines one unit of risk, **R**.
- **Take-profit:** $\text{RewardRisk} \times \text{R}$ from entry (default 1.8R).
- **Stage 1 — break-even:** once price moves +1R in your favour, the stop is pulled up to the entry price, removing downside risk.

- **Stage 2 — ATR trail:** the stop then trails by $\text{TrailAtrMult} \times \text{ATR}$ (default $2 \times \text{ATR}$) to lock in open profit.

The stop only ever tightens. The trade manager never loosens a stop — it moves it toward price only. A small epsilon (5% of ATR) suppresses churn from tiny, insignificant modifications.

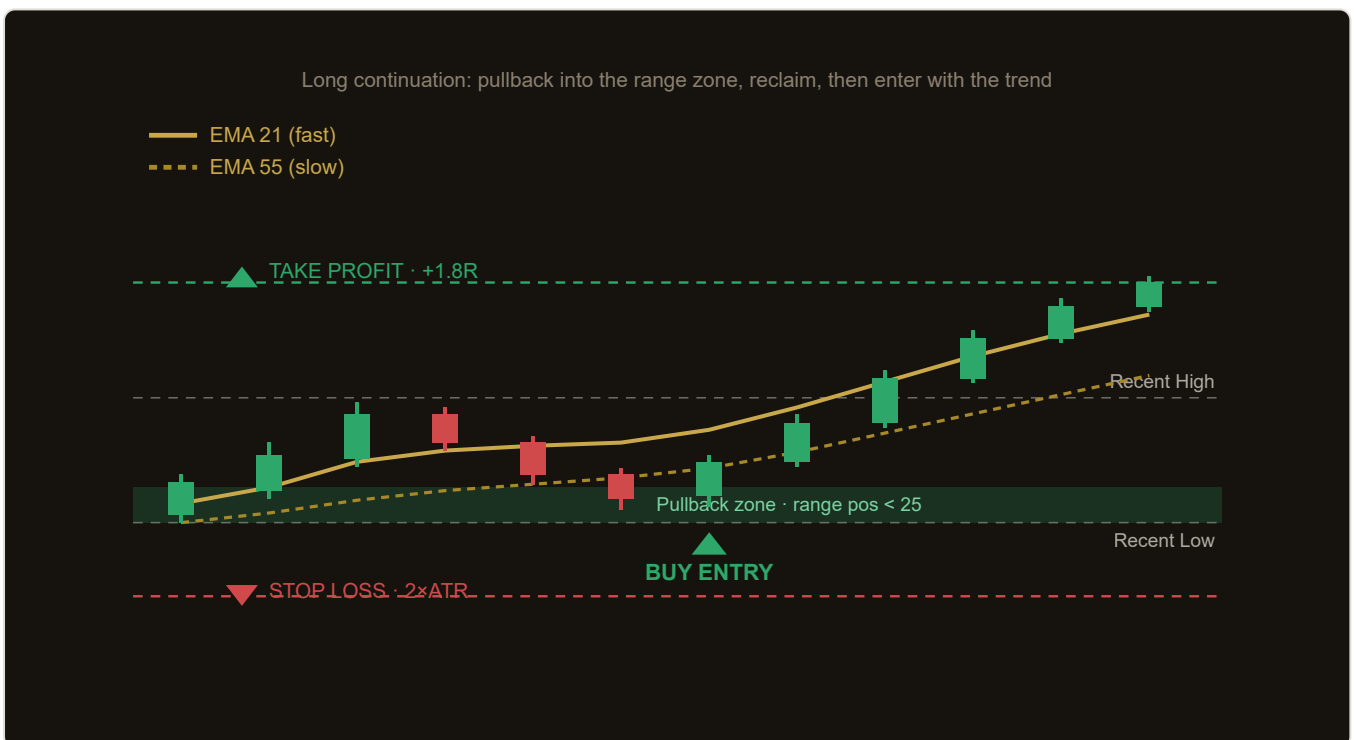
Worked example — a long trade

Suppose $\text{ATR} = 20$ pips and price triggers a long at 1.10000. The stop is placed $2 \times \text{ATR} = 40$ pips below, at 1.09600, so **R = 40 pips**

. The take-profit sits $1.8R = 72$ pips above, at 1.10720. After price advances 40 pips (to 1.10400), the stop jumps to break-even (1.10000) and thereafter trails 40 pips behind the market until either the trailing stop or the take-profit closes the trade.

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

Parameter	Default	Description
FastPeriod	21	Fast trend EMA period. Range 5–60, step 1.
SlowPeriod	55	Slow trend EMA period; also the trend-side price gate (close must be beyond it). Range 20–200, step 5.
RangePeriod	14	Lookback (bars) for the High/Low channel that defines the range-position oscillator. Range 5–40, step 1.
EntryZone	25.0	Pullback zone threshold on the 0–100 scale. Longs dip below <code>EntryZone</code> ; shorts rise above <code>100 - EntryZone</code> . Smaller = deeper pullback required. Range 10.0–40.0, step 1.0.
AtrPeriod	14	ATR period used for stop, target, and trail sizing. Range 7–30, step 1.
StopAtrMult	2.0	Initial stop distance as a multiple of ATR. This distance defines one unit of risk (R). Range 1.0–4.0, step 0.25.
RewardRisk	1.8	Take-profit distance as a multiple of the initial risk (R). Range 1.0–3.5, step 0.1.
TrailAtrMult	2.0	Trailing-stop distance as a multiple of ATR, engaged after break-even. Range 1.0–4.0, step 0.25.
Lots	0.10	Fixed position size in lots. Range 0.01–1.0, step 0.05.
Magic	720425	Magic number identifying this EA's positions, so it manages only its own trades.

Recommended Settings

The defaults are tuned for a balanced trend-following profile. The EA is timeframe-agnostic; choose the timeframe when you attach it. As a starting point:

- **Timeframe:** H1 offers a good balance of signal frequency and noise for the default EMA lengths (21/55). Higher timeframes (H4, D1) produce fewer but cleaner continuation setups.
- **Instruments:** Prefer instruments and sessions that trend — major FX pairs and index CFDs. Persistently ranging, choppy markets will generate frequent stop-outs because the trend filter rarely aligns cleanly.
- **Pullback depth:** Lower `EntryZone` (e.g. 15–20) demands deeper pullbacks — fewer, higher-conviction entries. Raise it (30–40) for more frequent, shallower entries.
- **Risk profile:** Widen `StopAtrMult` for volatile instruments to avoid premature stop-outs; adjust `RewardRisk` to match the instrument's typical follow-through.

Tip. Because a single unit of risk (R) is defined by `StopAtrMult × ATR`, always validate `Lots` against your account size and per-trade risk tolerance before live use. On volatile symbols the ATR-based stop can be substantially wider than a fixed-pip stop.

Optimise, don't curve-fit. The parameter ranges above are provided for exploration in the MT5 Strategy Tester. Over-optimising to a single historical window frequently produces settings that fail out-of-sample. Always forward-test on unseen data before committing capital.

How to Install on MetaTrader 5

- 1 Copy `RangePositionPullback.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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