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Maximize Your Profits

Volume Contraction Pullback Trend

Expert Advisor Documentation

PLATFORM	TYPE	TIMEFRAME	WEBSITE
MetaTrader 5 (MT5)	Trend Continuation (Pullback)	M5 – H1	www.algobot.live

Overview

Volume Contraction Pullback Trend is a trend-continuation Expert Advisor built on the classic *Volume Spread Analysis* (Tom Williams / Wyckoff) idea of the "*No Supply*" / "*No Demand*" test bar. Most volume filters hunt for a surge — a big bar, a spike, a running total. This strategy trades the exact opposite footprint: the **absence** of opposing volume.

During a healthy trend, a genuine pullback that the crowd is *not* willing to press should arrive on a **narrow spread** (a small high-to-low range relative to ATR) and on **low tick volume** that undercuts the bars immediately before it. A narrow, low-volume counter-trend bar signals that the opposing side has dried up:

- **In an uptrend** — a small down bar on shrinking volume is a "*No Supply*" test: sellers are absent, so the up-move should resume.
- **In a downtrend** — a small up bar on shrinking volume is a "*No Demand*" test: buyers are absent, so the down-move should resume.

The test bar alone is only a warning. A trade is taken only when the very next bar **confirms** by closing back through the test bar in the trend direction, and only when the move agrees with a sloped EMA baseline — so every entry is *with* the prevailing trend, never against it. Risk is fully volatility-scaled through an ATR-based stop and a reward:risk take-profit, with a single position managed per magic number.

> **The core idea in one line:** a quiet, narrow, low-volume pullback bar means the other side has stopped fighting — buy (or sell) the confirmation that the trend is stepping back in.

How It Works

Trend Regime — the EMA baseline

The prevailing trend is defined by an Exponential Moving Average (`EmaPeriod`, default 34) and its *slope*. The EMA is compared to its own value `TrendSlopeBars` (default 3) bars ago:

- **Rising EMA** (EMA now > EMA a few bars ago) → only long "No Supply" setups are allowed.
- **Falling EMA** (EMA now < EMA a few bars ago) → only short "No Demand" setups are allowed.

In addition, the confirmation bar must close on the correct side of the EMA (above it for longs, below it for shorts), keeping entries aligned with the baseline.

The Test Bar (No Supply / No Demand)

The candidate *test bar* is the bar just before the most recently closed bar. It must satisfy two independent gates simultaneously:

- **Narrow spread** — the test bar's high-to-low range must be smaller than `NarrowSpreadFactor` × ATR (default 0.7 × ATR). The bar is unusually quiet relative to current volatility.
- **Volume contraction** — the test bar's tick volume must undercut the *minimum* tick volume of the `VolBarsBack` (default 2) bars immediately preceding it. Participation is drying up.

Only when a bar is **both** narrow and lower-volume than its recent neighbours does it qualify as a test bar.

Entry Logic — the Confirmation Bar

A qualifying test bar is only half the signal. The *next* bar (the confirmation bar, the most recently closed bar) must complete the pattern:

LONG — NO SUPPLY

- EMA is rising and the confirmation bar closes above the EMA.
- The test bar is a small **down** bar (its close is below its open) — sellers testing, and failing.
- The confirmation bar closes **above the test bar's high** — demand steps back in.
- → A **Buy** is sent at the Ask.

SHORT — NO DEMAND

- EMA is falling and the confirmation bar closes below the EMA.

- The test bar is a small **up** bar (its close is above its open) — buyers testing, and failing.
- The confirmation bar closes **below the test bar's low** — supply steps back in.
- → A **Sell** is sent at the Bid.

Exit Logic — the ATR Bracket

Every position is managed entirely by a fixed, volatility-scaled bracket attached at entry — there is no discretionary or trailing exit:

- **Stop loss** = `AtrStopMult` × ATR away from entry (default 1.5 × ATR).
- **Take profit** = `RewardRiskRatio` × the stop distance (default 1.8 × the risk).

With the defaults, a trade risks 1.5 ATR to make 2.7 ATR, a reward:risk of 1.8 : 1. The position closes when either the stop or target is hit.

Worked example (long, illustrative)

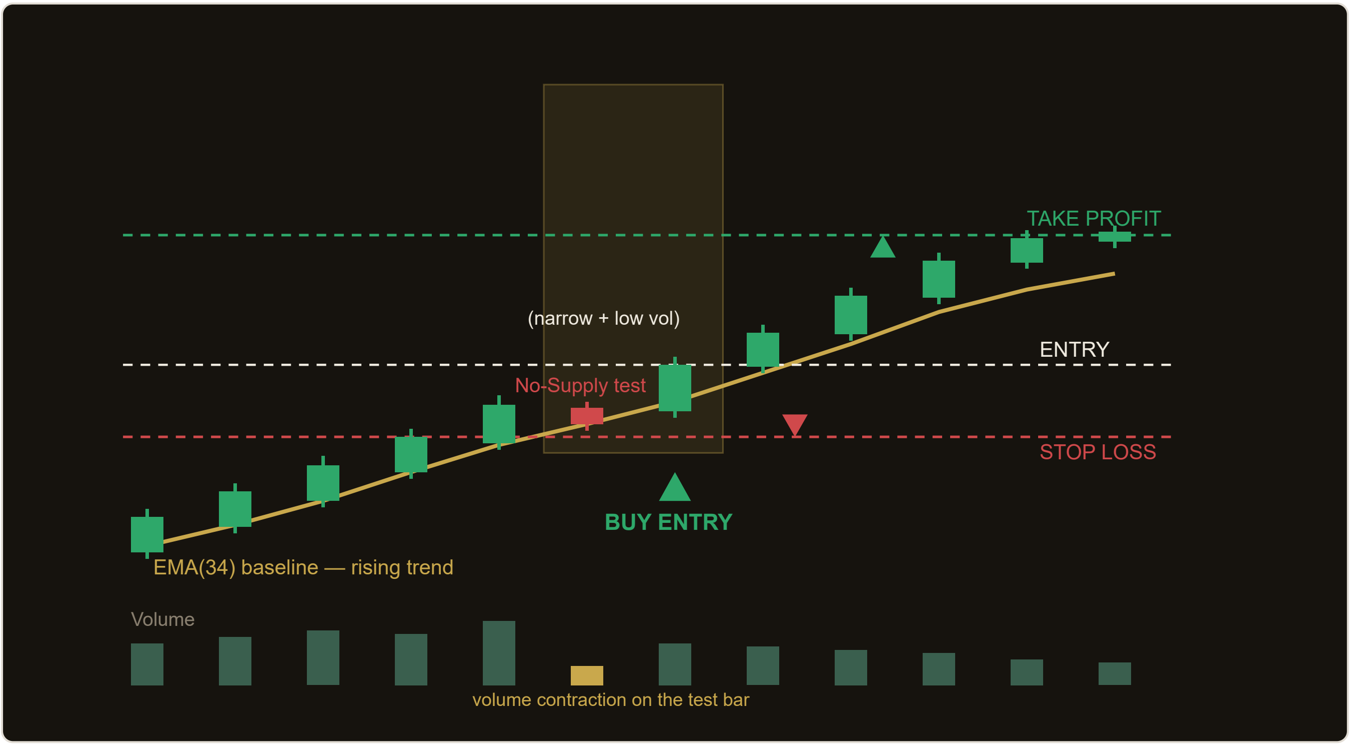
Suppose ATR = 20 pips and price triggers a "No Supply" long at entry 1.27400. With `AtrStopMult` = 1.5 the stop sits 30 pips away at 1.27100. With `RewardRiskRatio` = 1.8 the target is 1.8 × 30 = 54 pips away at 1.27940. The trade risks 30 pips to make 54 pips.

Trade Management & Filters

- **One position per magic** — no new entry is taken while a position with the same magic number is open.
- **Spread guard** — new entries are skipped whenever the current spread exceeds `MaxSpreadPoints` (default 60 points), avoiding costly fills.
- **Bar-close driven** — the logic evaluates once per newly-closed primary-timeframe bar, so signals never repaint on an unfinished bar.
- **Timeframe-agnostic** — every bar reference uses the chart's own timeframe, so the EA runs on whatever timeframe it is attached to.

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
EmaPeriod	`34`	Trend baseline EMA length. Range 10–120, step 2. Longer values define a slower, smoother trend regime.
TrendSlopeBars	`3`	How many bars back the EMA is compared to, to confirm slope direction. Range 1–10, step 1.
NarrowSpreadFactor	`0.7`	"Narrow spread" gate: the test bar's high-low range must be below this × ATR. Range 0.2–1.5, step 0.05. Lower = stricter (quieter test bars only).
VolBarsBack	`2`	The test bar's tick volume must undercut the minimum volume of this many preceding bars. Range 1–6, step 1.
AtrPeriod	`14`	ATR lookback used for both the narrow-spread gate and the risk bracket. Range 5–30, step 1.
AtrStopMult	`1.5`	Stop-loss distance from entry, expressed in ATRs. Range 0.5–4.0, step 0.1.
RewardRiskRatio	`1.8`	Take-profit as a reward:risk multiple of the stop distance. Range 1.0–5.0, step 0.1.
MaxSpreadPoints	`60`	Skip new entries when the current spread (in points) is wider than this. Range 5–300, step 5.
Lots	`0.10`	Fixed trade volume in lots. Range 0.01–1.0, step 0.05.
Magic	`7731`	Magic number identifying this EA's positions. Range 0–9,999,999, step 1.

Recommended Settings

The EA is designed for liquid instruments with meaningful, reliable tick volume — since the whole signal turns on a volume-contraction reading.

- **Instruments:** liquid FX majors (EURUSD, GBPUSD, USDJPY), metals (XAUUSD), and major indices.
- **Timeframes:** M5 through H1. Lower timeframes give more setups but noisier volume; higher timeframes give cleaner, less frequent tests.
- **Trend sensitivity:** raise `EmaPeriod` and `TrendSlopeBars` to demand a stronger, more established trend before trading.
- **Test-bar strictness:** lower `NarrowSpreadFactor` (e.g. 0.5) to accept only very quiet test bars; raise `VolBarsBack` to demand volume undercut a wider window.

Tip: Always backtest and forward-test on the specific symbol and timeframe you intend to trade. Because entries hinge on tick volume, verify your broker's volume feed is stable before deploying — spotty volume data will suppress or distort signals. Start on a demo account.

Note on tick volume: MT5 tick volume counts price changes, not traded contracts. It is a proxy for activity and varies by broker feed. This strategy compares tick volume *bar-to-bar on the same symbol*, which is robust to that limitation, but the absolute numbers are not comparable across brokers.

How to Install on MetaTrader 5

1. Copy `VolumeContractionPullbackTrend.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

Trading foreign exchange, CFDs, and other leveraged financial instruments involves substantial risk of loss and is not suitable for all investors. The strategies and tools described in this document are provided for **educational purposes only** and do not constitute financial advice, investment recommendations, or solicitation to trade. Always consult a qualified financial adviser before making trading decisions. Past backtest performance is not indicative of future results.