

Index Protector 5 MVA

A fixed-indexed annuity from MassMutual Ascend Life Insurance Company

- Opportunity to select from indexed strategies and a declared rate strategy
- Market value adjustments that end after five years
- Accepts additional purchase payments during the first two contract months
- Opportunity to receive lifetime income
- 10% penalty-free withdrawals

Rates effective 1/21/2025	Purchase payments \$250,000 and over	Purchase payments under \$250,000
1-year declared strategy interest rate	5.50%	5.35%
5-year declared strategy interest rate	5.50%	5.35%
S&P 500® 1-year point-to-point with cap	12.00%	11.50%
iShares U.S. Real Estate 1-year point-to-point with cap	17.50%	16.50%
S&P 500 Risk Control 1-year point-to-point with participation rate	95.00%	90.00%
S&P U.S. Retiree Spending 1-year point-to-point with participation rate	95.00%	90.00%
iShares MSCI EAFE 1-year point-to-point with cap	14.00%	13.75%
First Trust Barclays Edge Index 1-year point-to-point with cap	17.00%	16.50%
First Trust Barclays Edge Index 1-year point-to-point with 5-year cap lock	16.75%	16.25%

Strategies may vary. Please talk to your financial professional about availability.

MVA rates shown above. Rates and caps are current as of the date shown and are subject to change at any time.

Interest rates for indexed strategies are determined, in part, by the change in the applicable index or unit value, and are limited by the applicable cap or participation rate, but will never be lower than 0%. Indexed interest, if any, is credited at the end of each term year. If you allocate money to an indexed strategy, you aren't investing directly in any index or exchange-traded fund, the stocks included in any index, or the securities, commodities or other investments held in the portfolio of any exchange-traded fund. Withdrawals impact contract values. Taxable amounts withdrawn prior to age 59½ may be subject to a penalty tax in addition to ordinary income tax. If a waiver rider applies, early withdrawal charges are waived. Lifetime income payments are based on the account value.

Minimum Guarantees: The guaranteed minimum declared rate is 2.80%. Point-to-point strategies with cap have a minimum cap guarantee of 2.80% for contract duration. Point-to-point strategies with participation rate has a guaranteed minimum participation rate of 5.00% for contract duration. Future indexed strategies could offer alternate options and rates. The guaranteed minimum surrender value (GMSV) equals 87.5% of purchase payments minus all prior withdrawals (net of applicable market value adjustments) plus interest credited daily at the GMSV rate of 2.80%. The GMSV will not be less than the minimum values required by each state.

The S&P 500 Risk Control 10% Index refers to the S&P 500 Average Daily Risk Control 10% USD Price Return Index. For more information, visit US.SPIndices.com and search keyword SPXAV10P. For more information on the S&P U.S. Retiree Spending Index, visit US.SPIndices.com and search keyword SPRETIRE. For more information on the iShares U.S. Real Estate ETF, visit iShares.com and search ticker symbol IYR.

The "S&P 500® Index", the "S&P 500 Average Daily Risk Control 10% Price Return Index" and the "S&P U.S. Retiree Spending Index" are products of S&P Dow Jones Indices LLC or its affiliates ("SPDJI") and has been licensed for use by MassMutual Ascend Life Insurance Company. S&P®, S&P 500®, S&P 500 Average Daily Risk Control 10%™, US 500, The 500, iBoxx®, iTraxx® and CDX® are trademarks of S&P Global, Inc. or its affiliates ("S&P"); Dow Jones® is a registered trademark of Dow Jones Trademark Holdings LLC ("Dow Jones"); MassMutual Ascend Life Insurance Company's products are not sponsored, endorsed, sold or promoted by SPDJI, Dow Jones, S&P, their respective affiliates, and none of such parties make any representation regarding the advisability of investing in such products nor do they have any liability for any errors, omissions, or interruptions of the S&P 500® Index, the S&P 500 Average Daily Risk Control 10% Price Return Index and the S&P U.S. Retiree Spending Index.

The iShares MSCI EAFE ETF and the iShares U.S. Real Estate ETF are distributed by BlackRock Investments, LLC. iShares®, BLACKROCK®, and the corresponding logos are registered and unregistered trademarks of BlackRock, Inc. and its affiliates ("BlackRock"), and these trademarks have been licensed for certain purposes by MassMutual Ascend Life Insurance Company. MassMutual Ascend Life Insurance Company annuity products are not sponsored, endorsed, sold or promoted by BlackRock, and purchasers of an annuity from MassMutual Ascend Life Insurance Company do not acquire any interest in the iShares MSCI EAFE ETF or the iShares U.S. Real Estate ETF nor enter into any relationship of any kind with BlackRock. BlackRock makes no representation or warranty, express or implied, to the owners of any MassMutual Ascend Life Insurance Company annuity product or any member of the public regarding the advisability of purchasing an annuity, nor does it have any liability for any errors, omissions, interruptions or use of the iShares MSCI EAFE ETF or the iShares U.S. Real Estate ETF or any data related thereto.

The First Trust Barclays Edge Index ("FTIS Index") is a product of FT Indexing Solutions LLC ("FTIS") and is administered and calculated by Bloomberg Index Service Limited and its affiliates (collectively, "BISL"). FIRST TRUST® and First Trust Barclays Edge Index are trademarks of First Trust Portfolios L.P. (collectively, with FTIS and their respective affiliates, "First Trust"). The foregoing index and trademarks have been licensed for use for certain purposes by Barclays, Bloomberg, and MassMutual Ascend Life Insurance Company (collectively, the "Licensees") in connection with the FTIS Index and certain products utilizing the FTIS Index (collectively, the "Products").

The Capital Strength Index ("Nasdaq Index") is a product of Nasdaq, Inc. (collectively, with its affiliates, "Nasdaq"). NASDAQ®, CAPITAL STRENGTH INDEX™, NQCAPST™, and NQCAPSTT™ are trademarks of Nasdaq. The foregoing index and trademarks have been licensed for use for certain purposes by FTIS and Licensees in connection with the FTIS Index and the Products.

The Value Line Dividend Index ("Value Line Index") is a product of Value Line, Inc. ("Value Line"). VALUE LINE® and VALUE LINE DIVIDEND INDEX™ are trademarks or registered trademarks of Value Line. The foregoing index and trademarks have been licensed for use for certain purposes by FTIS and Licensees in connection with the FTIS Index and the Products. The FTIS Index is not sponsored, endorsed, recommended, sold or promoted by Value Line and Value Line makes no representation regarding the advisability of investing in any product utilizing the FTIS Index.

BLOOMBERG® is a trademark and service mark of Bloomberg Finance L.P. Bloomberg Finance L.P., BISL, and their affiliates ("Bloomberg") are not affiliated with First Trust or Barclays. Bloomberg's relationship to First Trust and Barclays is only (1) in the licensing of the FIRST TRUST®, BARCLAYS®, and FIRST TRUST BARCLAYS EDGE INDEX™ trademarks and (2) to act as the administrator and calculation agent of the FTIS Index, which is the property of FTIS. Bloomberg does not guarantee the timeliness, accurateness, or completeness of the FTIS Index or any data or information relating thereto and shall have no liability in connection with the FTIS Index or any data or information relating thereto.

The Products are not issued, sponsored, endorsed, sold, recommended, or promoted by First Trust, Bloomberg, Nasdaq, Value Line, or their respective affiliates (collectively, the “Companies”). The Companies do not make any representation regarding the advisability of investing in the Products or products based on the FTIS Index, Barclays Indices, Nasdaq Index, or Value Line Index, do not make any warranties or bear any liability with respect to such products, and do not make any warranties or bear any liability with respect to the Products, the FTIS Index, or another party’s index.

THE COMPANIES DO NOT GUARANTEE THE ADEQUACY, ACCURACY, TIMELINESS, COMPLETENESS, AND/OR UNINTERRUPTED CALCULATION OF THE PRODUCTS, FTIS INDEX, BARCLAYS INDICES, NASDAQ INDEX, VALUE LINE INDEX, OR ANY DATA INCLUDED THEREIN OR ANY COMMUNICATION WITH RESPECT THERETO, INCLUDING, ORAL, WRITTEN, OR ELECTRONIC COMMUNICATIONS. THE COMPANIES SHALL HAVE NO LIABILITY FOR ANY ERRORS, OMISSIONS, OR INTERRUPTIONS IN THE PRODUCTS, FTIS INDEX, BARCLAYS INDICES, NASDAQ INDEX, OR VALUE LINE INDEX. THE COMPANIES MAKE NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE RESULTS TO BE OBTAINED BY LICENSEES, OWNERS OF THE PRODUCTS OR OF PRODUCTS BASED ON THE FTIS INDEX, BARCLAYS INDICES, NASDAQ INDEX, OR VALUE LINE INDEX, OR BY ANY OTHER PERSON OR ENTITY FROM THE USE OF THE FTIS INDEX, BARCLAYS INDICES, NASDAQ INDEX, OR VALUE LINE INDEX, OR ANY DATA INCLUDED THEREIN.

Neither Barclays Bank PLC (“BB PLC”) nor any of its affiliates (collectively “Barclays”) is the issuer or producer of MassMutual Ascend’s products and Barclays has no responsibilities, obligations or duties to investors in MassMutual Ascend’s products. The Barclays US 2Y Treasury Futures Index, Barclays US 5Y Treasury Futures Index, Barclays US 10Y Note Index, and Barclays Switch USD Signal Index (collectively, the “Indices”), together with any Barclays indices that are components of the Indices, are trademarks owned by Barclays and, together with any component indices and index data, are licensed for use by FTIS in connection with the First Trust Barclays Edge Index.

Barclays’ only relationship with the MassMutual Ascend in respect of the Indices is the licensing of the Indices to FTIS, which are administered, compiled and published by BB PLC in its role as the index sponsor (the “Index Sponsor”) without regard to MassMutual Ascend’s products or investors in MassMutual Ascend’s products. Additionally, MassMutual Ascend as issuer or producer of MassMutual Ascend’s products may for itself execute transaction(s) with Barclays in or relating to the Indices in connection with MassMutual Ascend’s products. Investors acquire MassMutual Ascend’s products from MassMutual Ascend and investors neither acquire any interest in the Indices nor enter into any relationship of any kind whatsoever with Barclays upon making an investment in MassMutual Ascend’s products. MassMutual Ascend’s products are not sponsored, endorsed, sold or promoted by Barclays and Barclays makes no representation regarding the advisability of MassMutual Ascend’s products or use of the Indices or any data included therein. Barclays shall not be liable in any way to MassMutual Ascend, investors or to other third parties in respect of the use or accuracy of the Indices or any data included therein.

MassMutual Ascend Life Insurance CompanySM is not an investment adviser and the information provided in this document is not investment advice. You should consult your investment professional for advice based on your personal circumstances and financial situation.

Product issued by MassMutual Ascend Life Insurance Company (Cincinnati, Ohio), a wholly owned subsidiary of Massachusetts Mutual Life Insurance Company (MassMutual), under contract form numbers P1140219NW, P1140219OR and P1140219ID. Product not available in all states. Form numbers and features may vary by state.

All guarantees subject to the claims-paying ability of MassMutual Ascend Life Insurance Company.

This content does not apply in the state of New York.

NOT A BANK OR CREDIT UNION DEPOSIT OR OBLIGATION • NOT FDIC OR NCUA-INSURED • NOT INSURED BY ANY FEDERAL GOVERNMENT AGENCY • MAY LOSE VALUE • NOT GUARANTEED BY ANY BANK OR CREDIT UNION

∴ MassMutual Ascend

© 2025 MassMutual Ascend Life Insurance Company, Cincinnati, OH 45202.

All rights reserved. www.MassMutualAscend.com

F1144125NW

01/25