

[Source](#) | [Model](#) | [Option](#)  
| [Model\\_Option](#) | [Help on ap methods](#) | [Archived Tests](#)

# ap\_fusaiabrahamssgarra

## 1 Introduction

A barrier option is activated or extinguished when a specified asset price, index, or rates reaches a specified level. Some models of barrier option assume continuous monitoring of the barrier, others specify fixed times for monitoring of the barrier (typically daily closing). Fusai-Abrahams-Sgarra[1] gives an analytical solution for pricing discrete barrier options in the Black-Scholes framework and reduce the valuation problem to a Wiener-Hopf equation that can be solved analytically. See [there](#).

## References

- [1] G.FUSAI D.I.ABRAHAMS C.SGARRA. An exact analytical solution for discrete barrier options. *Working Paper SEMEQ Department University Piemonte Orientale Italy*, 2004. [1](#)