

NAG Library Chapter Contents

E05 – Global Optimization of a Function

E05 Chapter Introduction

| Routine | Mark of | | |
|----------------|----------------|-----------------------------------|---|
| Name | | Introduction | Purpose |
| E05JAF | 22 | nagf_glopt_bnd_mcs_init | Initialization routine for E05JBF |
| E05JBF | 22 | nagf_glopt_bnd_mcs_solve | Global optimization by multi-level coordinate search, simple bounds, using function values only |
| E05JCF | 22 | nagf_glopt_bnd_mcs_optset_file | Supply optional parameter values for E05JBF from external file |
| E05JDF | 22 | nagf_glopt_bnd_mcs_optset_string | Set a single optional parameter for E05JBF from a character string |
| E05JEF | 22 | nagf_glopt_bnd_mcs_optset_char | Set a single optional parameter for E05JBF from an ‘ON’/‘OFF’-valued character argument |
| E05JFF | 22 | nagf_glopt_bnd_mcs_optset_int | Set a single optional parameter for E05JBF from an integer argument |
| E05JGF | 22 | nagf_glopt_bnd_mcs_optset_real | Set a single optional parameter for E05JBF from a real argument |
| E05JHF | 22 | nagf_glopt_bnd_mcs_option_check | Determine whether an optional parameter for E05JBF has been set by you or not |
| E05JJF | 22 | nagf_glopt_bnd_mcs_optget_char | Get the setting of an ‘ON’/‘OFF’-valued character optional parameter of E05JBF |
| E05JKF | 22 | nagf_glopt_bnd_mcs_optget_int | Get the setting of an integer valued optional parameter of E05JBF |
| E05JLF | 22 | nagf_glopt_bnd_mcs_optget_real | Get the setting of a real valued optional parameter of E05JBF |
| E05SAF | 23 | nagf_glopt_bnd_pso | Global optimization using particle swarm algorithm (PSO), bound constraints only |
| E05SBF | 23 | nagf_glopt_nlp_pso | Global optimization using particle swarm algorithm (PSO), comprehensive |
| E05UCF | 24 | nagf_glopt_nlp_multistart_sqp | Global optimization using multi-start, nonlinear constraints |
| E05USF | 24 | nagf_glopt_nlp_multistart_sqp_lsq | Global optimization of a sum of squares problem using multi-start, nonlinear constraints |
| E05ZKF | 23 | nagf_glopt_optset | Option setting routine for E05SAF, E05SBF, E05UCF and E05USF |

E05ZLF

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nagf_glopt_optget

Option getting routine for E05SAF, E05SBF, E05UCF and E05USF