

NAG Library Chapter Contents

E05 – Global Optimization of a Function

E05 Chapter Introduction – a description of the Chapter and an overview of the algorithms available

Routine Name	Mark of 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
E05JIF	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	23	nagf_glopt_optget Option getting routine for E05SAF, E05SBF, E05UCF and E05USF
