NAG Library Chapter Contents

c05 – Roots of One or More Transcendental Equations

c05 Chapter Introduction

Function Name	Mark of Introduction	Purpose
c05agc	9	nag_zero_cont_func_brent_bsrch Zero of continuous function, Brent algorithm, from a given starting value, binary search for interval **Note**: this function is scheduled for withdrawal at Mark 25, see Advice on Replacement Calls for Withdrawn/Superseded Functions for further information.
c05auc	23	nag_zero_cont_func_brent_binsrch Zero of continuous function, Brent algorithm, from a given starting value, binary search for interval
c05avc	9	nag_interval_zero_cont_func Binary search for interval containing zero of continuous function (reverse communication)
c05awc	23	nag_zero_cont_func_cntin Zero of continuous function, continuation method, from a given starting value
c05axc	9	nag_zero_cont_func_cntin_rcomm Zero of continuous function, continuation method, from a given starting value (reverse communication)
c05ayc	23	nag_zero_cont_func_brent Zero of continuous function in a given interval, Brent algorithm
c05azc	9	nag_zero_cont_func_brent_rcomm Zero of continuous function in a given interval, Brent algorithm (reverse communication)
c05bac	9	nag_lambertW Real values of Lambert's W function, $W(x)$
c05bbc	23	nag_lambertW_complex Values of Lambert's W function, $W(z)$
c05qbc	23	nag_zero_nonlin_eqns_easy Solution of a system of nonlinear equations using function values only (easy-to-use)
c05qcc	23	nag_zero_nonlin_eqns_expert Solution of a system of nonlinear equations using function values only (comprehensive)
c05qdc	23	nag_zero_nonlin_eqns_rcomm Solution of a system of nonlinear equations using function values only (reverse communication)
c05qsc	23	nag_zero_sparse_nonlin_eqns_easy Solution of a sparse system of nonlinear equations using function values only (easy-to-use)
c05rbc	23	nag_zero_nonlin_eqns_deriv_easy Solution of a system of nonlinear equations using first derivatives (easy-to-use)
c05rcc	23	nag_zero_nonlin_eqns_deriv_expert Solution of a system of nonlinear equations using first derivatives (comprehensive)
c05rdc	23	nag_zero_nonlin_eqns_deriv_rcomm Solution of a system of nonlinear equations using first derivatives (reverse communication)

c05sdc	5	nag_zero_cont_func_bd_1 Zero of a continuous function of one variable, thread safe **Note**: this function is scheduled for withdrawal at Mark 25, see Advice on Replacement Calls for Withdrawn/Superseded Functions for further information.
c05ubc	5	nag_zero_nonlin_eqns_deriv_1 Solution of a system of nonlinear equations (using first derivatives), thread safe **Note**: this function is scheduled for withdrawal at Mark 25, see Advice on Replacement Calls for Withdrawn/Superseded Functions for further information.
c05zdc	23	nag_check_derivs Check user's function for calculating first derivatives of a set of nonlinear functions of several variables