## **NAG Fortran Library Chapter Contents**

## C05 - Roots of One or More Transcendental Equations

Note: please refer to the Users' Note for your implementation to check that a routine is available.

## C05 Chapter Introduction

Routine Name	Mark of Introduction	Purpose
C05ADF	8	Zero of continuous function in given interval, Bus and Dekker algorithm
C05AGF	8	Zero of continuous function, Bus and Dekker algorithm, from given starting value, binary search for interval
C05AJF	8	Zero of continuous function, continuation method, from a given starting value
C05AVF	8	Binary search for interval containing zero of continuous function (reverse communication)
C05AXF	8	Zero of continuous function by continuation method, from given starting value (reverse communication)
C05AZF	7	Zero in given interval of continuous function by Bus and Dekker algorithm (reverse communication)
C05NBF	9	Solution of system of nonlinear equations using function values only (easy-to-use)
C05NCF	9	Solution of system of nonlinear equations using function values only (comprehensive)
C05NDF	14	Solution of system of nonlinear equations using function values only (reverse communication)
C05PBF	9	Solution of system of nonlinear equations using first derivatives (easy-to-use)
C05PCF	9	Solution of system of nonlinear equations using first derivatives (comprehensive)
C05PDA	20	Solution of system of nonlinear equations using first derivatives (reverse communication) (thread safe)
C05PDF	14	Solution of system of nonlinear equations using first derivatives (reverse communication)
C05ZAF	9	Check user's routine for calculating first derivatives