

## NAG C Library Chapter Contents

### x02 – Machine Constants

x02 Chapter Introduction

| Routine Name | Mark of Introduction | Purpose  |
|--------------|----------------------|--|
| X02AHC       | 1                    | nag_max_sine_argument<br>The largest permissible argument for sin and cos            |
| X02AJC       | 1                    | nag_machine_precision<br>The machine precision                                       |
| X02AKC       | 1                    | nag_real_smallest_number<br>The smallest positive model number                       |
| X02ALC       | 1                    | nag_real_largest_number<br>The largest positive model number                         |
| X02AMC       | 1                    | nag_real_safe_small_number<br>Safe range of floating-point arithmetic                |
| X02ANC       | 6                    | nag_complex_safe_small_number<br>Safe range of NAG complex floating-point arithmetic |
| X02BBC       | 1                    | nag_max_integer<br>The largest representable integer                                 |
| X02BEC       | 1                    | nag_decimal_digits<br>The maximum number of decimal digits that can be represented   |
| X02BHC       | 1                    | nag_real_base<br>Parameter $b$ of model of floating-point arithmetic                 |
| X02BJC       | 1                    | nag_real_base_digits<br>Parameter $p$ of model of floating-point arithmetic          |
| X02BKC       | 1                    | nag_real_min_exponent<br>Parameter $e_{min}$ of model of floating-point arithmetic   |
| X02BLC       | 1                    | nag_real_max_exponent<br>Parameter $e_{max}$ of model of floating-point arithmetic   |
| X02DAC       | 1                    | nag_underflow_flag<br>Switch for taking precautions to avoid underflow               |
| X02DJC       | 1                    | nag_real_arithmetic_rounds<br>Parameter ROUNDS of model of floating-point arithmetic |