

NAG Fortran Library Routine Document

F06FEF (DRSCL)

Note: before using this routine, please read the Users' Note for your implementation to check the interpretation of *bold italicised* terms and other implementation-dependent details.

1 Purpose

F06FEF (DRSCL) performs the operation

$$y \leftarrow \frac{1}{\alpha}x$$

where x and y are n element real vectors, and α is a real non-zero scalar.

2 Specification

```
SUBROUTINE F06FEF (N, ALPHA, X, INCX)
  INTEGER          N, INCX
  double precision ALPHA, X(*)
```

The routine may be called by its BLAS name *drscl*.

3 Description

None.

4 References

None.

5 Parameters

- | | | |
|----|--|---------------------|
| 1: | N – INTEGER | <i>Input</i> |
| | <i>On entry:</i> n , the number of elements in x and y . | |
| 2: | ALPHA – <i>double precision</i> | <i>Input</i> |
| | <i>On entry:</i> the scalar α . | |
| | <i>Constraint:</i> ALPHA \neq 0. | |
| 3: | X(*) – <i>double precision</i> array | <i>Input/Output</i> |
| | <i>On entry:</i> the vector x . | |
| | <i>On exit:</i> the vector $\frac{1}{\alpha}x$. | |
| 4: | INCX – INTEGER | <i>Input</i> |
| | <i>On entry:</i> the increment in the subscripts of X between successive elements of x . | |
| | <i>Constraint:</i> INCX > 0. | |

6 Error Indicators and Warnings

None.