1 Purpose
nag_machine_precision (X02AJC) returns ε, the value *machine precision*.

2 Specification
#include <nag.h>
#include <nagx02.h>
double nag_machine_precision

3 Description
nag_machine_precision (X02AJC) is a constant defined in the C Header file.

nag_machine_precision (X02AJC) returns *machine precision*, computed as $\epsilon = \frac{1}{2} \times b^{1-p}$, where $b$ is the arithmetic base (see nag_real_base (X02BHC)) and $p$ is the number of significant base-$b$ digits (see nag_real_base_digits (X02BJC)).

It is important to note that the definition of $\epsilon$ here differs from that in ISO (1997).

4 References

5 Arguments
None.

6 Error Indicators and Warnings
None.

7 Accuracy
None.

8 Parallelism and Performance
Not applicable.

9 Further Comments
None.

10 Example
None.