

NAG Toolbox for MATLAB

x02al

1 Purpose

x02al returns the largest positive floating-point number.

2 Syntax

```
[result] = x02al()
```

3 Description

x02al returns the largest positive number in the model of floating-point arithmetic described in the X02 Chapter Introduction. The returned value is equal to $(1 - b^{-p}) \times b^{e_{\max}}$, where b is the arithmetic base (see x02bh) and $e_{\max}$ is the maximum exponent (see x02bl) in the model.

4 References

None.

5 Parameters

5.1 Compulsory Input Parameters

None.

5.2 Optional Input Parameters

None.

5.3 Input Parameters Omitted from the MATLAB Interface

None.

5.4 Output Parameters

1: **result** – double scalar

The result of the function.

6 Error Indicators and Warnings

None.

7 Accuracy

None.

8 Further Comments

None.

9 Example

```
[result] = x02al()  
result =  
    1.7977e+308
```
