

# Sample Nearest Surface Node



The *Sample Nearest Surface* node finds values at the closest points on the surface of a source mesh geometry. Non-face attributes are interpolated across the surface.

This node is similar to the [Geometry Proximity Node](#), but it gives the value of any attribute at the closest surface point, not just its position.

### Warning

Because the node samples the *surface* of a mesh rather than its edges or vertices, values from loose points and edges are ignored.

## Inputs

### Mesh

The geometry to retrieve the attribute from.

### Value

A field to evaluate on the *Source* geometry for use with the transfer method.

### Group ID

Is evaluated on the face domain and splits the input mesh into multiple parts, each with its own id.

### Sample Position

The position to start from when finding the closest location on the target mesh. By default, this is the same as if the [Position Node](#) was connected.

### Sample Group ID

Determines in which group the closest nearest surface is detected.

## Properties

### Data Type

The [data type](#) to use for the retrieved values.

## Outputs

### Value

The data retrieved and interpolated from the *Source* geometry, mapped based on the node's settings and inputs.

### Is Valid

Whether the sampling was successful. It can fail when the sampled group is empty.