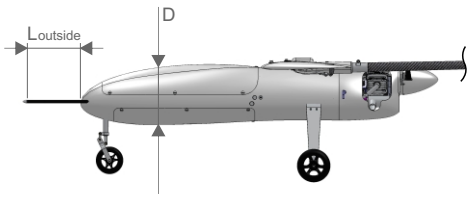
UAV FACTORY

UNMANNED PLATFORMS AND SUBSYSTEMS

v 1.0

Pitot - Static length selection

Nose mounting configuration:



The following recommendations* can be used for nose mounting configuration of the Pitot-Static assembly:

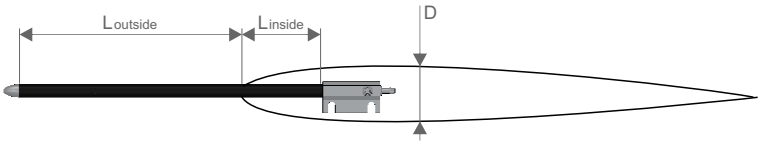
$$L_{outside} = 1.2 \times D$$
$$L = L_{outside} + L_{inside}$$

where, $L_{outside}$ is the length of the Pitot-Static tube that is located ahead of the streamlined nose shape, D is the maximum diameter of the fuselage body, L_{inside} is the length of the tube which is located inside the fuselage and L is the total length of the Pitot-Static tube. Please specify the L dimension during the ordering process, based on your particular mounting configuration.

* Note: the optimum Pitot- Static tube length is highly dependent on the actual flow around a particular shape.

Wing mounting configuration:

The following recommendations* can be used for wing mounting configuration of the Pitot-Static assembly:



$$L_{outside} = 10 \times t$$
$$L = L_{outside} + L_{inside}$$

where, $L_{outside}$ is the length of the Pitot-Static tube that is located ahead of the streamlined nose shape, t is the maximum thickness of the airfoil, L_{inside} is the length from the leading edge of the wing to the mounting bracket and L is the total length of the Pitot-Static tube. Please specify the L dimension during the ordering process, based on your particular mounting configuration. The Pitot-Static assembly needs to be mounted outboard from the fuselage towards the tip of the wing so that the influence of the fuselage on the measured airflow is minimized.

* Note: the optimum Pitot- Static tube length is highly dependent on the actual flow around a particular shape.

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