CFD FLOW SIMULATION

DOWNFORCE NAKED FRONTAL SPOILERS REF.22178

AERODYNAMIC TEST

KTM 990 DUKE/DUKE R

2024-





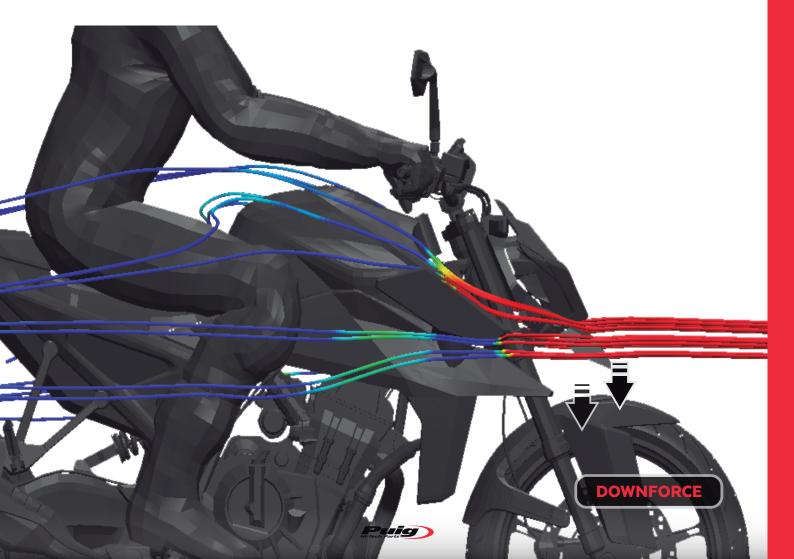
CFD FLOW SIMULATION

SPOILER'S DOWNFORCE



Downforce-Speed Chart:

On this chart we can see the downforce that the spoilers generate.



DRAG FORCE

Drag force - Speed Chart:

On this chart we can see the force that our bike has to overcome to advance depending on the speed we are travelling at. As we can observe this force is practically the same with the *Puig* Downforce Naked Frontal Spoiler. So we will gain downforce without affecting bike speed.



- DEPRESSURE

OVERPRESSURE

Due to its angles and frontal surface, it creates an overpressure on the top of the spoiler. The turbulance create below, generates a difference of pressure between the upper and lower part of the spoiler. Which ultimately generates the aerodynamic downforce.

