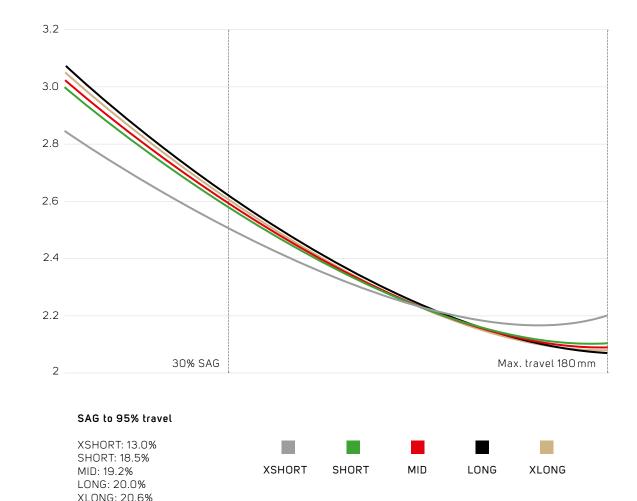
## KINEMATIC eONE-EIGHTY

## eONE-EIGHTY LEVERAGE RATIO OF DIFFERENT FRAME SIZES WITH 27.5" REAR WHEEL

In general, we wanted a lot of progression to optimise leverage with coil shocks and the new large volume air shocks. That's why the eONE-EIGHTY has the most progressive leverage ratio in the MERIDA range.

Each frame size has its own unique kinematics that provide different shock progression; the longer the frame, the greater the progression. As the rider gets heavier or rides more aggressively (as is often the case when sizing up), the risk of the shock bottoming out is much greater. Increasing the progression means we can give these riders more support at the end of the travel and more control in demanding situations.

We have around 13% progression in the smallest frame size to 20.6% in the largest, covering a range from a neutral position with sag (30%) to 95% of travel. This also works very well with all modern air and coil shocks.

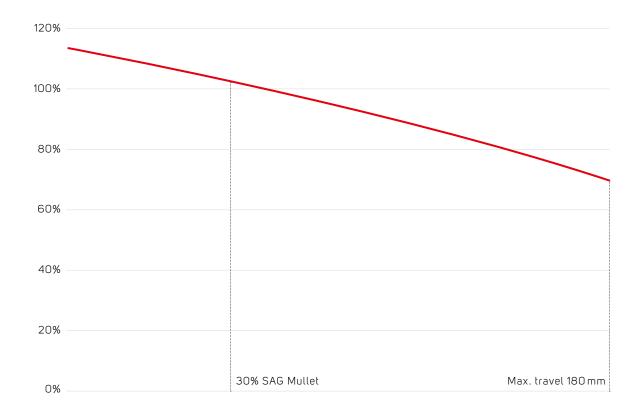




## eONE-EIGHTY ANTI-SQUAT SIZE MID 36/51T

The anti-squat graph describes the behaviour of the suspension as you pedal. We wanted a reasonable amount of anti-squat at the start and middle of the suspension to provide really efficient pedalling performance. Therefore we are slightly above 100% at sag.

However, the anti-squat value is much lower when you are deep into the travel, as pedalling efficiency is of little concern in this situation. The end result is a suspension that pedals well with very little pedal bob, but is active and unhindered on descents and big hits.





## **eONE-EIGHTY ANTI-RISE SIZE MID**

The effect of braking on the suspension is described by the anti-rise values.

In the sag position, the anti-rise is just over 100%, which helps to keep the bike level under braking on steep descents and on smooth, fast trails. But as you go deeper into the travel, the anti-rise decreases, resulting in a more active suspension and increased traction when braking on rough terrain or after big drops.

