

The Equimetre sensor has a movement sensor which allows it to measure the horse's movements in all directions. Thanks to these measurements, Equimetre can give indications on locomotion: it automatically detects the horse's gait, stride length and stride frequency throughout the training.

On the training map, the track is indicated in yellow for walk, orange for trot, red for canter.



Stride length and stride frequency curves should be analysed together with the speed curve as they help to determine the horse's acceleration strategy. The average data on the fastest interval present in the split times table gives a good idea of the stride length/stride frequency pair for each horse.

### Help with distance choices

INTERVALS

200 M

	Gait	Distance meters	Time min	Pace km/h	Average HR bpm	Average tilt %	Stride Length meters	Stride Freq. stride/s
▶ 1	Walk	840	10:00.0	5.0	67	0.0	1.5	0.95
▶ 2	Gallop	1265	03:40.0	20.7	138	0.4	3.2	1.80
▶ 3	Trot	95	00:26.0	13.2	123	0.4	2.6	1.47
▶ 4	Walk	305	04:35.0	4.0	105	0.0	1.3	0.89
▶ 5	Gallop	1035	02:38.0	23.6	148	-0.3	3.6	1.83
▶ 6	Walk	205	02:19.0	5.3	115	0.3	1.6	0.91
▶ 7	Trot	50	00:18.0	10.0	146	0.6	1.9	1.44
▶ 8	Walk	345	03:49.0	5.4	122	0.6	1.7	0.88
▼ 9	Gallop	1295	01:42.0	45.7	222	0.4	5.9	2.18

The Stride length/Stride frequency couple provides an objective help in the choice of distance for race entries since it gives information on the horse's speed strategy. In theory, a large stride length will rather benefit the horse over long distances, while a large stride frequency will rather be an asset for sprinting as it will allow the horse to reach a maximum speed quickly, but will be more difficult to hold over the distance.

### Points of reference

	Sprinter	Miler >1600m	Stayer > 2400m
Stride frequency (stride per seconde)	More than 2.43	Less than 2.4	Less than 2.35

  

	Stride frequency	Stride length
Average at 60 km/h for thoroughbreds monitored with Equimetre Works over 55 km/h	2.43	6,85
Average for trotters monitored with Equimetre Works over 40 klm/h	2.30	5.94