

Speed-Time-MPH-Coefficient

Time based on Speed through traps

$$\text{MPH} = \text{D/T} * 0,681818 * \text{coeff1}$$

Two Sensor are used for Measurements:

ET from Staged to Finish

&

1000 ft to Finish

The below chart is based on calculated Speed & Time using formula to the right >

Changing the Coefficient value will create a Speed Curve to give you a more accurate Drag Racing MPH/KPH

The Final Speeds are based on NHRA Results for 2022, adjust as needed for: TF-FC-PS-TA-ST-BK

Example: 1/32 Scale

$$1320 \text{ Ft (41.25 ft) with ET of } 3.725 = 325.22 \text{ MPH}$$

FORMULA:

$$\text{Staged to Finish Length} \div \text{ET} \times 0.681818 = \text{Real Scale Speed (RSS)}$$

$$41.25 \div 3.752 * 0.681818 = 7.49 \text{ Real Speed}$$

$$\text{Take Expected MPH} \div \text{RSS} = \text{Coefficient}$$

$$325.22 \div 7.496 = 43.385$$

Use this calculator for speeds

<https://www.calculatorsoup.com/calculators/math/speed-distance-time-calculator.php>

Formula in code

$$\text{MPH} = (\text{D} / \text{T}) * 0.681818 * \text{coeff1}$$

$$41.25 / 3.752 * 0,681818 * \text{coeff1 (43.385)}$$

SCALE / FEET	Staged to Finish ET	1000 ft to Finish	MPH From Staged to Finish in Top Fuel 3.752	MPH From Staged to Finish in Funny Car 4.004	MPH From Staged to Finish in Pro-Stock 6.598	MPH From Staged to Finish in Top Alcohol 5.522	MPH From Staged to Finish in Street/Stock 8.610	MPH From Staged to Finish in Bike 6.921
FULL 1/1	1320 Ft	320 ft	239.872	224.775	136.405	162.984	104.53	130.039
1/2	660 ft	160 ft	119.936	112.388	68.202	81.492	52.264	65.019
1/5	264 ft	64 ft	47.974	44.955	27.281	32.596	20.905	26.007
1/8	165 ft	40 ft	29.984	28.096	17.050	20.373	13.066	16.254
1/10	132 ft	32 ft	23.987	22.477	13.640	16.298	10.453	13.003
1/12	110 ft	26.66 ft	19.989	18.731	11.367	13.582	8.710	10.836
1/24	55 ft	13.33 ft	9.994	9.365	5.683	6.791	4.355	5.418
1/32	41.25 ft	10 ft	7.496	7.024	4.262	5.093	3.266	4.063
1/43	30.69 ft	7.44 ft	5.577	5.226	3.1714	3.789	2.430	3.023
1/64	20.62 ft	5 ft	3.747	3.511	2.133	2.546	1.632	2.031
1/87	15.17 ft	3.86 ft	2.756	2.583	1.567	1.873	1.201	1.494