

# Cessna 172 Operating Specifications

<b>V Speeds</b>		<b>Knots</b>
V <sub>SO</sub>	Stall speed, flaps down, power off	33
V <sub>SI</sub>	Stall speed, flaps up, power off	44
V <sub>X</sub>	Best angle of climb (most altitude over time)	60
V <sub>Y</sub>	Best rate of climb (most distance over time)	76
V <sub>r</sub>	Normal takeoff rotation speed (add 5kts for cross-wind)	55
V <sub>G</sub>	Best glide speed	65
V <sub>FE</sub>	Maximum flaps extended speed	85
V <sub>A</sub>	Maneuvering speed	99
V <sub>NO</sub>	Maximum structural cruising speed (yellow)	127
V <sub>NE</sub>	Never exceed speed (redline)	158
	Normal climb	70-80
	Normal approach +5 kts to speed range for no flaps	60-70
	Short-field takeoff climb (10o flaps)	56
	Short-field approach (30o flaps)	61
	Knots true airspeed @ 75% power [for estimation purposes only]	110
	MPH true airspeed @ 75% power [for estimation purposes only]	127
	Maximum cross-wind component (knots)	15
<b>Fuel/Oil</b>		
	Fuel capacity – gallons	43
	Usable fuel capacity	40
	Fuel grade	100LL
	Maximum endurance (hours @ 75% power)	3.8
	Rule-of-thumb fuel burn per hour [for estimation purposes only]	9
	Oil grade (quarts - Aero Shell)	15w50
	Oil capacity	7
	Minimum safe oil level	5
<b>Weights</b>		
	Maximum weight (pounds)	2400
	Empty weight	1454
	Useful load with no fuel	953
	Useful load with full fuel	695
	Maximum baggage	120
<b>Tire Pressures</b>		
	Nose Tire PSI / Size 5.00-5 / 4-Ply Rated	n/a
	Nose Tire PSI / Size 5.00-5 / 6-Ply Rated	34
	Main Tires PSI / Size 15x6.00-6 / 4-Ply Rated	n/a
	Main Tires PSI / Size 6.00-6 / 4-Ply Rated	28
	Main Tires PSI / Size 15x6.00-6 / 6-Ply Rated	n/a
	Maximum Strut PSI	45