

Masses of VEX Hardware and Parts

		<u>Mass (grams)</u>	
		<u>VEX EDR</u>	<u>Robosource</u>
<u>Category</u>	<u>Item</u>	<u>Steel</u>	<u>Nylon</u>
6-32 Screws	0.250"	0.58	0.11
	0.500"	0.98	0.17
8-32 Screws	0.250"	0.94	0.18
	0.375"	1.20	0.23
	0.500"	1.44	0.25
	0.625"	1.73	
	0.750"	2.00	0.33
	0.875"	2.25	
	1.000"	2.51	0.40
	1.500"	3.54	0.55
	2.000"	4.59	0.70
	1" Coupler	1.92	0.27
Nuts	Shoulder	1.24	
	Nylon Hex	0.18	
	Hex	1.19	
	Keps	1.29	
	Nylock	1.75	
	Thin Nylock(1)	1.28	
Standoffs	0.250"	0.40	
	0.500"	0.80	
	0.750"	1.24	
	1.000"	1.62	
	1.500"	2.65	
	2.000"	3.92	
	3.000"	6.42	
Washers & Spacers	Nylon Washer	0.06	
	Steel Washer	0.32	
	0.125"	0.39	
	0.250"	0.76	
	0.375"	1.12	
	0.500"	1.49	
	Black Small	0.16	
	Black Large	0.31	
	HS #1	0.08	
	HS #2	0.15	
	HS #3	0.32	
	HS #4	0.74	

<u>Category</u>	<u>Item</u>	<u>Mass (grams)</u>
Plastic Sheets	Polycarbonate, per Square Inch	1.22
	ABS, per Square Inch	0.96
Shafts	Shaft, per Linear Inch	1.91
	HS Shaft, per Linear Inch	7.50
Wiring	4" Zip Tie	0.27
	Cable Retaining Clips	1.33
	Adhesive Clip	0.35
Misc.	Steel Collar w/ Set Screw	3.81
	VEX IQ Friction Collar	0.42
	Clamping Collar, no screw	2.48
	HS Clamping Collar, no screw	3.64
	Bearing	1.67
	HS Bearing	2.19
	Pillow Bearings	1.36
	Plastic Lock Bar	1.75
	Steel Lock Bar	3.35
	45° Gussets	5.77

To record masses, 10 of each item were placed onto a ± 0.01 gram scale. Information is provided as a reference only and no guarantees of accuracy are made.

Notes:

1: For an example of thin (jam) nylock nuts, see: <https://www.boltdepot.com/Product-Details.aspx?product=18194>