

NAR CERTIFIED MODEL ROCKET MOTORS
APPROVED FOR USE IN TEAM AMERICA 2018

As of March 16, 2018

<u>Designation</u>	<u>Mfgr.</u>	<u>Casing</u> <u>Size</u> (mm)	<u>Propellant</u> <u>Mass</u> (grams)	<u>Total</u> <u>Impulse</u> (N-sec.)
1/4A3-3T	Estes	13 x 45	0.8	0.62
1/2A3-2T,4T	Estes	13 x 45	2.0	1.25
1/2A6-2	Estes	18 x 70	2.6	1.25
A3-4T	Estes	13 x 45	3.3	2.50
A6-4	Quest	18 x 70	3.5	2.50
A8-0,3,5	Estes	18 x 70	3.3	2.50
A10-0T	Estes	13 x 45	3.6	1.88
A10-3T,PT	Estes	13 x 45	3.8	2.50
B4-2,4	Estes	18 x 70	6.0	5.00
B6-0	Estes	18 x 70	5.6	4.90
B6-2,4,6	Estes	18 x 70	5.6	5.00
B6-0,2,4	Quest	18 x 70	6.5	5.00
C6-0,3,5,7	Estes	18 x 70	10.8	9.0
C6-0	Quest	18 x 70	11.0	8.8
C6-3,5	Quest	18 x 70	12.0	8.76
C11-0,3,5,7	Estes	24 x 70	12.0	9.0
D5-P	Quest	20 x 88	25.0	19.6
D9W-4,7	R Aerotech	24 x 70	10.1	20.0
D10-3,5,7	Apogee	18 x 70	9.8	18.3
D10-3,5,7	Aerotech	18 x 70	9.8	18.3
D11-P	Estes	24 x 70	24.5	18.0
D12-0,3,5,7	Estes	24 x 70	21.1	17.0
D13W-4,7,10	R Aerotech	18 x 70	9.8	20.0
D15T-4,7	R Aerotech	24 x 70	8.9	20.0
D21T-4,7	Aerotech	18 x 70	9.6	20.0
D24T-4,7,10	R Aerotech	18 x 70	8.8	18.5
E6-4,6,8,P	Apogee	24 x 70	22.0	37.8
E9-4,6,8,P	Estes	24 x 95	35.8	28.5
E11J-3	R Aerotech	24 x 70	25.0	31.7
E12-0,4,6,8	Estes	24 x 95	35.9	27.2
E15W-4,7	Aerotech	24 x 65	16.2	35.0
E16-0,4,6,8	Estes	29 x 114	40.0	33.4
E16W-4,7	R Aerotech	29 x 124	19.0	40.0
E18W-4,8	R Aerotech	24 x 70	20.7	39.0
E20-4,7,10	Aerotech	24 x 65	16.2	35.0
E22SS-13A	R Cesaroni	24 x 69	13.4	24.2
E23T-5,8	R Aerotech	29 x 124	17.4	37.0
E28T-4,7	R Aerotech	24 x 70	18.4	40.0
E30T-4,7	Aerotech	24 x 70	17.8	33.6
E30-4,7	Estes	24 x 70	17.8	33.6
E31WT-15A	R Cesaroni	24 x 69	11.2	26.1
E75VM-17A	R Cesaroni	24 x 69	10.4	24.8
F10-4,6,8	Apogee	29 x 93	40.0	74.3

F12J-3,5	R	Aerotech	24 x 70	30.0	45.0
F15-0,4,6,8		Estes	29 x 114	60.0	49.6
F20W-4,7		Aerotech	29 x 73	30.0	51.8
F22J-5,7	R	Aerotech	29 x 124	46.3	65.0
F23FJ-4,7		Aerotech	29 x 83	30.0	41.2
F24W-4,7	R	Aerotech	24 x 70	19.0	50.0
F25W-4,6,9		Aerotech	29 x 98	35.6	80.0
F26FJ-6,9		Aerotech	29 x 98	43.1	62.2
F26FJ-6		Estes	29 x 98	43.1	62.2
F27R-4,8		Aerotech	29 x 83	28.4	49.6
F29-12A	R	Cesaroni	29 x 98	30.9	54.8
F30FJ-4,6,8		Aerotech	24 x 90	31.2	47.0
F30WH/LB-6A	R	Cesaroni	24 x 133	40.0	73.1
F31CL-12A	R	Cesaroni	29 x 98	25.7	55.5
F32T-4,6,8		Aerotech	24 x 90	25.8	56.9
F32WH-12A	R	Cesaroni	29 x 98	29.9	52.8
F35W-5,8,11	R	Aerotech	24 x 95	30.0	57.1
F36SS-11A	R	Cesaroni	29 x 98	29.5	41.2
F36BS-14A	R	Cesaroni	29 x 98	25.6	51.5
F37W-S,M,L	R	Aerotech	29 x 99	28.2	50.0
F39T-3,6	R	Aerotech	24 x 70	22.7	50.0
F40W-4,7,10	R	Aerotech	29 x 124	40.0	80.0
F42T-4,8		Aerotech	29 x 83	27.0	52.9
F44W-4,8		Aerotech	24 x 70	19.7	41.5
F50T-4,6,9		Aerotech	29 x 98	37.9	80.0
F50T-4,6		Estes	29 x 98	37.9	80.0
F51BS-13A	R	Cesaroni	24 x 101	22.0	49.9
F51CL-12A	R	Cesaroni	24 x 133	33.0	75.0
*F51NT-10	R	Aerotech	24 x 70	26.5	55.1
F52T-5,8,11	R	Aerotech	29 x 124	36.6	78.0
F59WT-12A	R	Cesaroni	29 x 98	26.1	57.0
F62T-S,M,L	R	Aerotech	29 x 89	30.5	51.0
*F67W-4,6,9		Aerotech	29 x 89	30.0	61.1
F70WT-14A	R	Cesaroni	24 x 101	22.5	52.9
F79SS-13A	R	Cesaroni	24 x 133	40.1	67.8

Additional notes:

- The manufacturer-reported total impulse and propellant mass of motors often differs from the values reported above, which are based on testing by the NAR Standards & Testing Committee. The values above are the ones that will be used in TARC.
- "*" indicates motors added since the August 12, 2017 version of this list