

# THRUST TIME CURVES



Comparison

44

Newton's

24

12

6

2

6  
4  
2

.2

1

1/8 A1.9

1/4 A1.7

1/2 A1.5

E 24.0

F 23.8

(AWAITING SHIPPING  
& STORAGE CLASSIFICATION  
FROM FEDERAL & NATIONAL  
ORGANIZATIONS)

D 12

E 11.8

D 6.1

Seconds

1

2

3

**AVI**  
**astroport**

AVI " GOLD " SERIES

MOTOR CHARACTERISTICS

11 November 1975

MOTOR TYPE	DIAMETER MM	MAIN TUBE LENGTH MM	PROPELLANT MASS GM	TOTAL MASS GM	TOTAL IMPULSE NT-SEC	MAX THRUST NT	BURN TIME SEC	FINAL MASS GM
1/8A1.9-0	8.75	12	0.37	1.07	0.29	2.70	0.151	0.69
1/8A1.9-SP	8.75	12	0.37	1.18	0.30	2.70	0.156	0.81
1A1.7-0	8.75	19	0.70	1.56	0.39	2.68	0.345	0.89
1A1.7-SP	8.75	19	0.70	1.76	0.51	2.68	0.356	1.11
1A1.7-2.50	8.75	19	0.70	2.02	0.51	2.68	0.356	0.96
1A1.7-4.00	8.75	19	0.70	2.16	0.51	2.68	0.356	0.98
1A1.5-0	8.75	38	1.42	2.70	1.20	2.69	0.811	1.31
1A1.5-SP	8.75	38	1.42	2.90	1.23	2.69	0.831	1.50
1A1.5-3.00	8.75	38	1.42	3.15	1.23	2.69	0.831	1.39
1A1.5-5.00	8.75	38	1.42	3.27	1.23	2.69	0.831	1.41
D6.1-0	18	100	22.00	35.20	19.20	11.46	3.147	14.03
D6.1-SP	18	100	22.00	36.10	19.70	11.46	3.23	15.05
D6.1-3.25	18	100	22.00	37.89	19.70	11.46	3.23	15.37
D6.1-6.75	18	100	22.00	38.56	19.70	11.46	3.23	15.52
E11.8-0	23.5	100	40.00	62.13	36.20	21.77	3.07	24.11
E11.8-SP	23.5	100	40.00	65.05	36.50	21.77	3.09	27.16
E11.8-4.25	23.5	100	40.00	68.50	36.50	21.77	3.09	30.35
E11.8-7.50	23.5	100	40.00	69.70	36.50	21.77	3.09	30.58
E24.0-0	33.0	80	49.20	91.00	38.52	41.22	1.61	47.07
E24.0-SP	33.0	80	49.20	94.50	39.05	41.22	1.63	52.06
E24.0-3.75	33.0	80	49.20	99.96	39.02	41.22	1.63	56.14
E24.0-6.00	33.0	80	49.20	103.72	38.98	41.22	1.63	57.33
F23.8-0	33.0	100	80.00	132.00	70.03	41.20	2.94	52.68
F23.8-SP	33.0	100	80.00	139.60	70.58	41.18	2.97	57.50
F23.8-4.25	33.0	100	80.00	140.61	70.73	40.79	2.97	61.54
F23.8-6.50	33.0	100	80.00	142.07	71.06	41.77	2.99	62.03

The numbers or values appearing above are arrived at from actual static tests and measurement using calibrated instruments and valid statistical procedures. The base of data at this time however is small for certain motor types and the above values may and will change with time as a broader data base is established and design changes are instituted. For latest data refer to data sheets supplied with the motor packs.

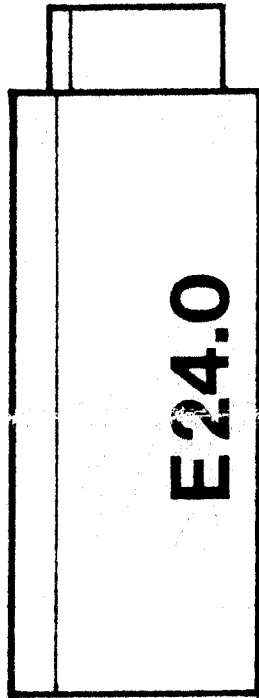




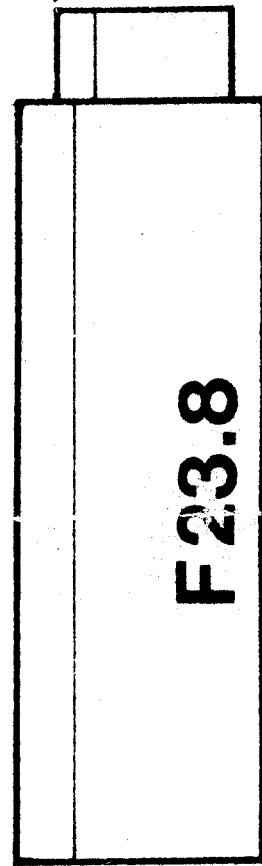
**D6.1**



**E11.8**



**E24.0**



**F23.8**

**1/8 A1.9**

**1/4 A1.7**

Centimeters



**1/2 A1.5**



**B6**

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**MOTOR**  
**SIZES**