

# Birleştirilmiş CAR/NAR/TRA Sertifikalı Roket Motor Listesi

NAR üyelerine bir hizmet olarak, NAR Standartları ve Test Komitesi (S&T) NAR fırlatmalarında kullanılmak için sertifikalandırılmış tüm roket motorlarının bir listesini yayınlamıştır. NAR, Tripoli Rocketry Association (TRA), ve Kanada Roketçilik Kurumu (CAR) olarak, karşılıklı bir sertifika politikası yürürlüğe girdiğinden, tüm kuruluşlar tarafından sertifikalandırılmış motorlar bu listede yer almaktadır. Tüm kuruluşların üyeleri, motorunuz ülkenize nakliye için uygun görüldükten (ABD’de DOT sertifikası) sonra herhangi bir organizasyonda onaylanmış motorları kullanabilirler.

Bu liste, bir motorun belirli bir tarihte "süresinin dolduğunu" gösterebilir. Bu durum, genel kullanıma ilişkin söz konusu olan motorun sertifikasının belirtilen tarihte iptal edileceği anlamına gelir. Son kullanma tarihi motor sertifikasının iptal edilmesinden üç yıl sonra olarak kabul edildiğinden dolayı, önceden satın aldıkları motorları kullanmaları için pilotlara zaman tanınır. Son kullanma tarihi geçtikten sonra, motorlar artık kullanılmamalıdır. Bu bağlamda bir motor süresinin dolduğu şeklinde listelendikten sonra, aynı tipteki yeni imal edilmiş motorlarda otomatik olarak kullanım için onaylanmamış sayılırlar. Sertifikasyon için yeniden test edilecekler ve ayrı ayrı listeleneceklerdir.

NAR sertifikalı motorların listesindeki eklemeler, silme işlemleri ve değişiklikler kullanıma girdikçe NAR bültenlerinde yayınlanacaktır. Ayrıca, aşağıdaki Web sitesinde elektronik olarak da yayınlanacaktır:

NAR Web site [nar.org](http://nar.org)

Yarışma Direktörleri gibi, NAR sertifikalı motorların en yeni listesini isteyen kişiler S&T Sekreteri ile temasa geçebilir:

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Ayrıca, sorular S&T Başkanlığına yönlendirilebilir:

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NAR S&T tarafından test edilmeyen motorlarla ilgili sorular aşağıdaki adreslere yönlendirilmelidir:

- TRA: Alan Whitmore, Başkan, Tripoli Rocketry Association Motor Test Komitesi
- CAR: Thomas Raithby, Başkan, Kanada Roketçilik Kurumu Motor Test Komitesi

Daha fazla bilgi isterseniz, S&T Motor Data Sheets from NARTS’den S&T Motor Veri Sayfalarının basılı kopyalarını sipariş ediniz. Bu rapor NAR S&T tarafından sertifikalandırılmış mevcut her bir motorun veri sayfalarından oluşmaktadır. Her veri sayfası irtifa simülasyonlu bilgisayar programlarında kullanılmak üzere test ateşleme değerleri ile birlikte bir itme kuvveti eğrisi, 32 veri noktasından fazla ölçülmüş ortalama itme kuvveti ve toplam itici kuvvetini içerir.

## Motor Tipi Anahtarı

- S - Tek kullanımlık motoru belirtir.
- R - Sadece üretici tarafından tedarik edilen kovan, kapaklar, nozül ve itici yakıtla sertifikalandırılmış tekrar doldurabilir motoru belirtir.
- H - Hibrit motoru belirtir.
- T - Tribrit motoru belirtir.
- ! - Sarı renkte, yüksek ışıklı kıvılcımlı bir motoru belirtir: daha fazla dikkat gerektirir.
- (a) - Sadece Animal donanımı ile kullanımında sertifikalandırılmıştır.
- (HP) - Toplam itici kuvveti ne olursa olsun yüksek bir güç motoru olarak bahsedilen motor.

## Gecikme Tipleri Anahtarı

- numara listesi - belirtilen gecikmelerin her biri için, motorlar yapılır
- numaraA - motor bir gecikmeyle gelir. Ancak üreticinin Gecikme Ayar Aleti ile kısa devre yapılabilir
- P - motor is plugged: it has Hayır ejection charge or tracking smoke
- PS - motor tapalıdır, ancak izleme dumanı çıkartır

## Gecikmeler hakkında notlar

Gecikmeler, değerin üretici tarafından belirtilen değer aralığında olup olmadığını görmek için ölçülür. NFPA 1125 Kodu, talep edilen değerin eksi % 20'si ile artı % 20'si arasında, 1.5 saniyeden az ve 3 saniyeden büyük olmayacak şekilde aralığı belirtir. Örneğin, 10 saniye gecikmesi olduğunu iddia eden bir motor, 8 saniye veya 12 saniye gecikme veya arada herhangi bir gecikme olması durumunda NFPA gerekliliğini karşılar çünkü bu değerler % 20 içindedir.

4 saniye gecikmeli olduğu iddia edilen motor, ölçülen gecikme 3.2 - 4.8 saniye değil 2.5 - 5.5 saniye ise NFPA kodunu karşılar, çünkü 1.5 saniye 0.8'den büyük (4 saniyenin % 20'si).

20 saniye gecikmeyi geçtiği iddia edilen motor, ölçülen gecikme 16 - 24 saniye değil 17 - 23 saniye ise NFPA kodunu karşılar, çünkü 3 saniye maksimumdur ve 20 saniyenin %20' si 4 saniyedir.

Ayarlanabilir gecikmeler, en uzun gecikme (ayarlanmamış) kullanılarak ve üreticinin gecikme ayar aleti (DAT) kullanılarak oluşturulan daha kısa gecikmeler olarak test edilir. En uzun gecikmenin ölçülen değerleri ve ayarlanan gecikmelerin her birinin izin verilen aralık dahilinde olması durumunda motor, NFPA gereksinimini karşılar. Örneğin, 10 saniye ayarlanmamış gecikmeli bir motorda, 3, 5 ve 7 saniye kaldırma ayarlı bir DAT kullanarak ölçülen değerler bu aralıklar dahilindeyse motor NFPA 1125 gerekliliğini karşılayacaktır:

| DAT Ayarı     | Beklenen Gecikme | Geçiş Değeri | Yöntem |
|---------------|------------------|--------------|--------|
| Kullanılmıyor | 10               | 8 - 12       | %20    |
| -3            | 7                | 5.6 - 8.4    | %20    |
| -5            | 5                | 3.5 - 6.5    | 1.5    |
| -7            | 3                | 1.5 - 4.5    | 1.5    |

Dikkate alınması gereken bir diğer husus da kompozit motorlardaki gecikmelerin irtifa tarafından etkilenebileceğidir. NFPA 1125 Kodu, testin deniz seviyesinde yapılmasını gerektirir, ancak hem NAR S&T hem de Tripoli Motor Test Komitesi tarafından gerçekleştirilen deneyler, fırlatma irtifası binlerce feet yüksekliğe çıktığı için kompozit motor gecikmelerinin daha yavaş yanabileceğini göstermektedir. Dolayısıyla, bir motorun gecikmeleri NFPA gereksinimlerini karşılasa bile, 5000 feet yüksekliğe fırlatılan bir roket için görülen gerçek gecikme daha uzun olabilir.

## Üretici Kısaltmaları Anahtarı

- AeroTech - AeroTech, ISP veya Dr Rocket
- Alpha - Alpha Hybrid Rocketry, LLC
- Animal - Animal Motor Works
- Apogee - Apogee Components
- Cesaroni - Cesaroni TechHayırlogy
- Inc.Contrail - Contrail Rockets
- LLC Estes - Estes Industries
- Gorilla - Gorilla Motor
- Hypertek – Hypertek
- Kosdon/AT - Kosdon by AeroTech
- Loki - Loki Research
- PML - Public Missiles Ltd.
- Propulsion - Propulsion Polymers
- Q-Jet/AT - Q-Jet by AeroTech
- Quest - Quest Aerospace
- RATTworks - R.A.T.T. Works Precision Rocket Motors
- Roadrunner - RoadRunner Rocketry
- SkyRipper - Sky Ripper Systems
- WCH - West Coast Hybrids

## İtici yakıt Ağırlık Kısaltmaları

cc - (santimetre küp) hibrit motordaki nitroz oksit hacmini belirtir

## Yarışma Onaylı Kayıt Anahtarı

- Evet - NAR yarışmaları için izin verilmiş motor.
- BEKLEMEDE - Şu anda yarışmalar için izin verilmesi bekleniyor.
- HPR - Yüksek güç motoru olduğundan yarışmalar için izin verilmez.
- Hayır - Yaygın olmadığından yarışmalar için izin verilmez.

Not: "Yarışma Onaylı" NAR ABD Model Roket Spor Yönetmeliği uyarınca yapılan yarışmalarda kullanılmak üzere onaylandığı anlamına gelir. Bu ibare TARC veya FAI yarışmalarında kullanılmak üzere onaylanmış ile aynı değildir.

## Not

Herhangi bir sütundaki N/A – işareti sertifika kuruluşu tarafından sağlanmayan bilgiyi belirtir

**Yayınlama:** 04 Kasım 2022

| Tip Tanımı                              | Üretici | Boyutları (mm) | İtici kuvvet (N-san) | İtici yakıt Ağırlığı (g) | Test Kurumu | Yarışma Onaylı |
|---|---------|----------------|----------------------|--------------------------|-------------|----------------|
| S <a href="#">1/8A.2 (MicroMaxx)</a> -1 | Quest   | 6 x 26         | 0.135                | 0.4                      | NAR         | Hayır          |

|                   |  |                |                       |                             |                                 |                    |                       |
|-------------------|--|----------------|-----------------------|-----------------------------|---------------------------------|--------------------|-----------------------|
| S                 | <a href="#">1/8A.5 (MicroMaxxII)</a> -1,NE | Quest          | 6 x 26                | 0.22                        | 0.5                             | NAR                | Evet                  |
| <b>Tip Tanımı</b> |  | <b>Üretici</b> | <b>Boyutları (mm)</b> | <b>İtici kuvvet (N-san)</b> | <b>İtici yakıt Ağırlığı (g)</b> | <b>Test Kurumu</b> | <b>Yarışma Onaylı</b> |
| S                 | <a href="#">1/4A3T</a> -3                  | Estes          | 13 x 45               | 0.62                        | 0.8                             | NAR                | Evet                  |
| <b>Tip Tanımı</b> |  | <b>Üretici</b> | <b>Boyutları (mm)</b> | <b>İtici kuvvet (N-san)</b> | <b>İtici yakıt Ağırlığı (g)</b> | <b>Test Kurumu</b> | <b>Yarışma Onaylı</b> |
| S                 | <a href="#">1/2A3T</a> -2,4                | Estes          | 13 x 45               | 1.25                        | 2                               | NAR                | Evet                  |
| S                 | <a href="#">1/2A6</a> -2                   | Estes          | 18 x 70               | 1.25                        | 2.6                             | NAR                | Evet                  |
| <b>Tip Tanımı</b> |  | <b>Üretici</b> | <b>Boyutları (mm)</b> | <b>İtici kuvvet (N-san)</b> | <b>İtici yakıt Ağırlığı (g)</b> | <b>Test Kurumu</b> | <b>Yarışma Onaylı</b> |
| S                 | <a href="#">A3T</a> -2,4                   | Quest          | 13 x 55               | 1.71                        | 3.6                             | NAR                | Hayır                 |
| S                 | <a href="#">A3T</a> -2,6                   | Estes          | 13 x 45               | 2.5                         | 3.3                             | NAR                | Hayır                 |
| S                 | <a href="#">A3T</a> -4                     | Estes          | 13 x 45               | 2.5                         | 3.3                             | NAR                | Evet                  |
| S                 | A3-4,6                                     | Q-Jet/AT       | 18 x 80               | 2.5                         | 2.1                             | TRA                | Evet                  |
| S                 | <a href="#">A6</a> -4                      | Quest          | 18 x 70               | 2.5                         | 3.5                             | NAR                | Hayır                 |
| S                 | <a href="#">A6</a> -4                      | Quest          | 18 x 70               | 2.3                         | 3.5                             | NAR                | Hayır                 |
| S                 | <a href="#">A8</a> -0                      | Estes          | 18 x 70               | 2.15                        | 3.84                            | NAR                | Evet                  |
| S                 | <a href="#">A8</a> -3                      | Quest          | 18 x 70               | 1.86                        | 3.6                             | NAR                | Hayır                 |
| S                 | <a href="#">A8</a> -3,5                    | Estes          | 18 x 70               | 2.5                         | 3.3                             | NAR                | Evet                  |
| S                 | <a href="#">A10T</a> -0                    | Estes          | 13 x 45               | 1.88                        | 3.57                            | NAR                | Evet                  |
| S                 | <a href="#">A10T</a> -3,P                  | Estes          | 13 x 45               | 2.5                         | 3.8                             | NAR                | Evet                  |
| <b>Tip Tanımı</b> |  | <b>Üretici</b> | <b>Boyutları (mm)</b> | <b>İtici kuvvet (N-san)</b> | <b>İtici yakıt Ağırlığı (g)</b> | <b>Test Kurumu</b> | <b>Yarışma Onaylı</b> |
| S                 | <a href="#">B4</a> -2,4                    | Estes          | 18 x 70               | 5                           | 6                               | NAR                | Evet                  |
| S                 | <a href="#">B4</a> -4                      | Quest          | 18 x 70               | 3.84                        | 10.4                            | NAR                | Hayır                 |
| S                 | B4-4,6                                     | Q-Jet/AT       | 18 x 80               | 4.86                        | 3.6                             | TRA                | Evet                  |
| S                 | <a href="#">B6</a> -0                      | Estes          | 18 x 70               | 4.9                         | 5.6                             | NAR                | Evet                  |
| S                 | <a href="#">B6</a> -0,4                    | Quest          | 18 x 70               | 5                           | 6.5                             | NAR                | Hayır                 |
| S                 | <a href="#">B6</a> -2                      | Quest          | 18 x 70               | 5                           | 6.5                             | NAR                | Hayır                 |
| S                 | <a href="#">B6</a> -2,4,6                  | Estes          | 18 x 70               | 5                           | 5.6                             | NAR                | Evet                  |
| S                 | <a href="#">B6</a> -4                      | Quest          | 18 x 70               | 4.85                        | 6.5                             | NAR                | Hayır                 |
| S                 | B6W-4,6                                    | Q-Jet/AT       | 18 x 70               | 4.865                       | 2.8                             | TRA                | Evet                  |
| <b>Tip Tanımı</b> |  | <b>Üretici</b> | <b>Boyutları (mm)</b> | <b>İtici kuvvet (N-san)</b> | <b>İtici yakıt Ağırlığı (g)</b> | <b>Test Kurumu</b> | <b>Yarışma Onaylı</b> |
| S                 | <a href="#">C3.4</a> -6                    | AeroTech       | 18 x 55               | 9                           | 5.2                             | NAR                | Hayır                 |
| R                 | <a href="#">C3.4</a> -P                    | AeroTech       | 18 x 72               | 9.22                        | 5.2                             | NAR                | Evet                  |
| S                 | <a href="#">C5</a> -3                      | Estes          | 18 x 70               | 7.79                        | 11                              | NAR                | Evet                  |
| S                 | <a href="#">C6</a> -0                      | Quest          | 18 x 70               | 8.8                         | 11                              | NAR                | Hayır                 |
| S                 | <a href="#">C6</a> -0,3,5,7                | Estes          | 18 x 70               | 9                           | 10.8                            | NAR                | Evet                  |
| S                 | <a href="#">C6</a> -3,5                    | Quest          | 18 x 70               | 8.5                         | 11                              | NAR                | Hayır                 |
| S                 | <a href="#">C6</a> -3,5                    | Quest          | 18 x 70               | 8.76                        | 12                              | NAR                | Hayır                 |
| S                 | <a href="#">C11</a> -0,7                   | Estes          | 24 x 70               | 9                           | 12                              | NAR                | Evet                  |
| S                 | <a href="#">C11</a> -3,5                   | Estes          | 24 x 70               | 9                           | 12                              | NAR                | Evet                  |

|   |                             |                |                       |                             |                                 |                    |                       |
|---|-----------------------------|----------------|-----------------------|-----------------------------|---------------------------------|--------------------|-----------------------|
| S | C12-4,6,8                   | Q-Jet/AT       | 18 x 70               | 9.8                         | 10.4                            | TRA                | Evet                  |
| S | C18W-4,6,8                  | Q-Jet/AT       | 18 x 70               | 9.8                         | 5.6                             | TRA                | Evet                  |
|   | <b>Tip Tanımı</b>           | <b>Üretici</b> | <b>Boyutları (mm)</b> | <b>İtici kuvvet (N-san)</b> | <b>İtici yakıt Ağırlığı (g)</b> | <b>Test Kurumu</b> | <b>Yarışma Onaylı</b> |
| R | <a href="#">D2.3-P</a>      | AeroTech       | 18 x 72               | 17.21                       | 10.7                            | NAR                | Evet                  |
| S | <a href="#">D5-4,6</a>      | Quest          | 20 x 96               | 17.61                       | 24                              | NAR                | Hayır                 |
| S | <a href="#">D5-P</a>        | Quest          | 20 x 88               | 19.6                        | 25                              | NAR                | Hayır                 |
| R | <a href="#">D7-RC</a>       | AeroTech       | 24 x 70               | 20                          | 10.5                            | NAR                | Evet                  |
| S | <a href="#">D8-0,3,5</a>    | Quest          | 24 x 70               | 18.59                       | 22                              | NAR                | Hayır                 |
| R | <a href="#">D9-4,7</a>      | AeroTech       | 24 x 70               | 20                          | 10.1                            | NAR                | Evet                  |
| S | <a href="#">D10-3,5,7</a>   | AeroTech       | 18 x 70               | 18.3                        | 9.8                             | NAR                | Hayır                 |
| S | <a href="#">D10-3,5,7</a>   | Apogee         | 18 x 70               | 18.3                        | 9.8                             | NAR                | Hayır                 |
| S | <a href="#">D11-P</a>       | Estes          | 24 x 70               | 18                          | 24.5                            | NAR                | Hayır                 |
| S | <a href="#">D12-0,3,5,7</a> | Estes          | 24 x 70               | 17                          | 21.1                            | NAR                | Evet                  |
| R | <a href="#">D13-4,7,10</a>  | AeroTech       | 18 x 70               | 20                          | 9.8                             | NAR                | Evet                  |
| R | <a href="#">D15-4,6</a>     | AeroTech       | 24 x 70               | 20                          | 8.9                             | NAR                | Evet                  |
| S | D16FJ-4,6,8                 | Q-Jet/AT       | 18 x 78.6             | 12.4                        | 12.5                            | TRA                | Evet                  |
| S | D20W-4,6,8                  | Q-Jet/AT       | 18 x 70               | 13.8                        | 8.7                             | TRA                | Evet                  |
| S | <a href="#">D21-4,7</a>     | AeroTech       | 18 x 70               | 20                          | 9.6                             | NAR                | Hayır                 |
| S | D22W-4,7,10                 | Q-Jet/AT       | 24 x 70               | 19.33                       | 12                              | TRA                | Evet                  |
| R | <a href="#">D24-4,7</a>     | AeroTech       | 18 x 70               | 18.5                        | 8.8                             | NAR                | Evet                  |
|   | <b>Tip Tanımı</b>           | <b>Üretici</b> | <b>Boyutları (mm)</b> | <b>İtici kuvvet (N-san)</b> | <b>İtici yakıt Ağırlığı (g)</b> | <b>Test Kurumu</b> | <b>Yarışma Onaylı</b> |
| S | <a href="#">E6-4,6,8</a>    | AeroTech       | 24 x 70               | 37.8                        | 22                              | NAR                | Hayır                 |
| S | <a href="#">E6-4,6,8</a>    | Apogee         | 24 x 70               | 37.8                        | 22                              | NAR                | Evet                  |
| S | <a href="#">E6-P</a>        | AeroTech       | 24 x 70               | 37.8                        | 22                              | NAR                | Evet                  |
| S | <a href="#">E6-P</a>        | Apogee         | 24 x 70               | 37.8                        | 22                              | NAR                | Hayır                 |
| R | <a href="#">E6-RC</a>       | AeroTech       | 24 x 70               | 40                          | 21.5                            | NAR                | Evet                  |
| R | <a href="#">E7-RC</a>       | AeroTech       | 24 x 70               | 30                          | 17.1                            | NAR                | Evet                  |
| S | <a href="#">E9-0</a>        | Estes          | 24 x 95               | 28.5                        | 35.8                            | NAR                | Hayır                 |
| S | <a href="#">E9-4,6,8,P</a>  | Estes          | 24 x 95               | 28.5                        | 35.8                            | NAR                | Hayır                 |
| R | <a href="#">E11J-3</a>      | AeroTech       | 24 x 70               | 31.7                        | 25                              | NAR                | Evet                  |
| S | <a href="#">E12-0,4,6,8</a> | Estes          | 24 x 95               | 27.24                       | 35.9                            | NAR                | Evet                  |
| R | <a href="#">E12J-RC</a>     | AeroTech       | 24 x 70               | 36                          | 30.3                            | NAR                | Evet                  |
| S | <a href="#">E15-4,7</a>     | AeroTech       | 24 x 70               | 35                          | 16.2                            | NAR                | Hayır                 |
| S | <a href="#">E15W-P</a>      | AeroTech       | 24 x 70               | 40                          | 20.1                            | NAR                | Hayır                 |
| S | <a href="#">E16-0,4,6,8</a> | Estes          | 29 x 114              | 33.38                       | 40                              | NAR                | Evet                  |
| R | <a href="#">E16-4,7</a>     | AeroTech       | 29 x 124              | 40                          | 19                              | NAR                | Evet                  |
| R | <a href="#">E18-4,8</a>     | AeroTech       | 24 x 70               | 39                          | 20.7                            | NAR                | Evet                  |
| S | <a href="#">E20W-10</a>     | AeroTech       | 24 x 65               | 35                          | 16.2                            | NAR                | Hayır                 |
| S | <a href="#">E20W-4,7</a>    | AeroTech       | 24 x 65               | 35                          | 16.2                            | NAR                | Evet                  |
| R | E22SS-13A                   | Cesaroni       | 24 x 69               | 24.2                        | 13.4                            | CAR                | Evet                  |
| R | <a href="#">E23-5,8</a>     | AeroTech       | 29 x 124              | 37                          | 17.4                            | NAR                | Evet                  |

|   |                              |                |                       |                             |                                 |                    |                       |
|---|------------------------------|----------------|-----------------------|-----------------------------|---------------------------------|--------------------|-----------------------|
| S | E25R-4,7,P                   | Roadrunner     | 29 x 76               | 38.7                        | 20.6                            | TRA                | Hayır                 |
| S | E26W-4,7,10                  | Q-Jet/AT       | 24 x 70               | 27.85                       | 18.3                            | TRA                | Evet                  |
| R | <a href="#">E28</a> -4,7     | AeroTech       | 24 x 70               | 40                          | 18.4                            | NAR                | Evet                  |
| S | <a href="#">E30</a> -4,7     | AeroTech       | 24 x 70               | 33.6                        | 17.8                            | NAR                | Evet                  |
| S | <a href="#">E30</a> -4,7     | Estes          | 24 x 70               | 33.6                        | 17.8                            | NAR                | Evet                  |
| R | E31WT-15A                    | Cesaroni       | 24 x 69               | 26.1                        | 11.2                            | CAR                | Evet                  |
| S | E35W-5,8,11                  | Q-Jet/AT       | 24 x 112.77           | 39.38                       | 25.4                            | TRA                | Hayır                 |
| R | E75VM-17A                    | Cesaroni       | 24 x 69               | 24.8                        | 10.4                            | CAR                | Evet                  |
|   | <b>Tip Tanımı</b>            | <b>Üretici</b> | <b>Boyutları (mm)</b> | <b>İtici kuvvet (N-san)</b> | <b>İtici yakıt Ağırlığı (g)</b> | <b>Test Kurumu</b> | <b>Yarışma Onaylı</b> |
| S | <a href="#">F10</a> -4,6,8   | Apogee         | 29 x 93               | 74.3                        | 40                              | NAR                | Evet                  |
| R | <a href="#">F12</a> -2,5     | AeroTech       | 24 x 70               | 45                          | 30                              | NAR                | Evet                  |
| R | <a href="#">F13</a> -RC      | AeroTech       | 32 x 107              | 63                          | 32.3                            | NAR                | Evet                  |
| S | <a href="#">F15</a> -0,4,6,8 | Estes          | 29 x 114              | 49.61                       | 60                              | NAR                | Evet                  |
| R | <a href="#">F16</a> -RC      | AeroTech       | 32 x 107              | 80                          | 62.5                            | NAR                | Evet                  |
| S | <a href="#">F20</a> -4,7     | AeroTech       | 29 x 83               | 51.75                       | 30                              | NAR                | Evet                  |
| S | F21W-4,6,8                   | AeroTech       | 24 x 98               | 55                          | 30                              | TRA                | Hayır                 |
| R | <a href="#">F22</a> -4,7     | AeroTech       | 29 x 124              | 65                          | 46.3                            | NAR                | Evet                  |
| S | <a href="#">F23FJ</a> -4,7   | AeroTech       | 29 x 73               | 56                          | 32                              | NAR                | Hayır                 |
| S | <a href="#">F23FJ</a> -4,7   | AeroTech       | 29 x 83               | 41.2                        | 30                              | NAR                | Evet                  |
| R | <a href="#">F23SK</a> -RC    | AeroTech       | 32 x 107              | 70                          | 37.8                            | NAR                | Hayır                 |
| R | <a href="#">F24</a> -4,7     | AeroTech       | 24 x 70               | 50                          | 19                              | NAR                | Evet                  |
| S | <a href="#">F25W</a> -4,6,9  | AeroTech       | 29 x 98               | 80                          | 35.6                            | NAR                | Evet                  |
| S | <a href="#">F26FJ</a> -6     | Estes          | 29 x 98               | 62.2                        | 43.1                            | NAR                | Evet                  |
| S | <a href="#">F26FJ</a> -6,9   | AeroTech       | 29 x 98               | 62.2                        | 43.1                            | NAR                | Evet                  |
| S | <a href="#">F27R</a> -4,8    | AeroTech       | 29 x 83               | 49.6                        | 28.4                            | NAR                | Evet                  |
| R | F29IM-12A                    | Cesaroni       | 29 x 98               | 54.8                        | 30.9                            | CAR                | Evet                  |
| S | <a href="#">F30FJ</a> -4,6,8 | AeroTech       | 24 x 90               | 47                          | 31.2                            | NAR                | Evet                  |
| R | F30WH/LB-6A                  | Cesaroni       | 24 x 133              | 73.1                        | 40                              | CAR                | Evet                  |
| R | F31CL-12A                    | Cesaroni       | 29 x 98               | 55.5                        | 25.7                            | CAR                | Evet                  |
| R | F32WH-12A                    | Cesaroni       | 29 x 98               | 52.8                        | 29.9                            | CAR                | Evet                  |
| S | <a href="#">F32T</a> -4,6,8  | AeroTech       | 24 x 90               | 56.9                        | 25.8                            | NAR                | Evet                  |
| R | <a href="#">F35W</a> -5,8,11 | AeroTech       | 24 x 95               | 57.1                        | 30                              | NAR                | Evet                  |
| S | <a href="#">F35</a> -6,10    | Roadrunner     | 29 x 112              | 76.5                        | 40.1                            | NAR                | Hayır                 |
| R | F36SS-11A                    | Cesaroni       | 29 x 98               | 41.2                        | 29.5                            | CAR                | Evet                  |
| R | F36BS-14A                    | Cesaroni       | 29 x 98               | 51.5                        | 25.6                            | CAR                | Evet                  |
| R | <a href="#">F37</a> -6,10,14 | AeroTech       | 29 x 99               | 50                          | 28.2                            | NAR                | Evet                  |
| R | <a href="#">F39</a> -3,6     | AeroTech       | 24 x 70               | 50                          | 22.7                            | NAR                | Evet                  |
| R | <a href="#">F40</a> -4,7,10  | AeroTech       | 29 x 124              | 80                          | 40                              | NAR                | Evet                  |
| S | F41W-5,8,11                  | Q-Jet/AT       | 24 x 114.25           | 45.5                        | 30                              | TRA                | Hayır                 |
| S | <a href="#">F42T</a> -4,8    | AeroTech       | 29 x 83               | 52.9                        | 27                              | NAR                | Evet                  |
| S | <a href="#">F44W</a> -4,8    | AeroTech       | 24 x 70               | 41.46                       | 19.7                            | NAR                | Evet                  |

|    |                               |                |                           |                                 |                                     |                        |                           |
|----|-------------------------------|----------------|---------------------------|---------------------------------|-------------------------------------|------------------------|---------------------------|
| S  | F45R-5,8,P                    | Roadrunner     | 29 x 93                   | 62.3                            | 30                                  | TRA                    | Hayır                     |
| R! | (HP) F50SK-13A                | Cesaroni       | 24 x 133                  | 59.7                            | 31.7                                | CAR                    | HPR                       |
| S  | <a href="#">F50T</a> -4,6     | Estes          | 29 x 98                   | 80                              | 37.9                                | NAR                    | Evet                      |
| S  | <a href="#">F50</a> -4,6,9    | AeroTech       | 29 x 98                   | 80                              | 37.9                                | NAR                    | Evet                      |
| S  | <a href="#">F50T</a> -6       | PML            | 29 x 98                   | 80                              | 37.9                                | NAR                    | Hayır                     |
| R  | <a href="#">F51NT</a> -10     | AeroTech       | 24 x 95                   | 55.11                           | 26.5                                | NAR                    | Evet                      |
| R  | F51CL-12A                     | Cesaroni       | 24 x 133                  | 75                              | 33                                  | CAR                    | Evet                      |
| R  | F51BS-13A                     | Cesaroni       | 24 x 101                  | 49.9                            | 22                                  | CAR                    | Evet                      |
| S  | F52C-5,8,12                   | AeroTech       | 29 x 112                  | 66.2                            | 30                                  | TRA                    | Hayır                     |
| R  | <a href="#">F52</a> -6,8,11   | AeroTech       | 29 x 124                  | 78                              | 36.6                                | NAR                    | Evet                      |
| R  | F59WT-12A                     | Cesaroni       | 29 x 98                   | 57                              | 26.1                                | CAR                    | Evet                      |
| S  | <a href="#">F60</a> -4,7,10   | Roadrunner     | 29 x 112                  | 75.9                            | 38.1                                | NAR                    | Hayır                     |
| R  | <a href="#">F62FJ</a> -10     | AeroTech       | 24 x 95                   | 47.57                           | 32.2                                | NAR                    | Evet                      |
| R  | F62T-S,M,L                    | AeroTech       | 29 x 89                   | 51                              | 30.5                                | TRA                    | Evet                      |
| R  | <a href="#">F63R</a> -10      | AeroTech       | 24 x 95                   | 49.5                            | 27.6                                | NAR                    | Evet                      |
| S  | <a href="#">F67W</a> -4,6,9   | AeroTech       | 29 x 83                   | 61.12                           | 30                                  | NAR                    | Evet                      |
| R  | F70WT-14A                     | Cesaroni       | 24 x 101                  | 52.9                            | 22.5                                | CAR                    | Evet                      |
| R  | F79SS-13A                     | Cesaroni       | 24 x 133                  | 67.8                            | 40.1                                | CAR                    | Evet                      |
| R  | (HP) F85WT-15A                | Cesaroni       | 24 x 133                  | 73.6                            | 33.7                                | CAR                    | HPR                       |
| R  | (HP) F120VM-14A               | Cesaroni       | 29 x 98                   | 56                              | 25.3                                | CAR                    | HPR                       |
| R  | (HP) F240VM-15A               | Cesaroni       | 24 x 133                  | 68.3                            | 30.3                                | CAR                    | HPR                       |
|    | <b>Tip Tanımı</b>             | <b>Üretici</b> | <b>Boyutları<br/>(mm)</b> | <b>İtici kuvvet<br/>(N-san)</b> | <b>İtici yakıt<br/>Ağırlığı (g)</b> | <b>Test<br/>Kurumu</b> | <b>Yarışma<br/>Onaylı</b> |
| S  | G8ST-P                        | AeroTech       | 29 x 156                  | 129.99                          | 83.4                                | TRA                    | Hayır                     |
| R  | <a href="#">G12</a> -P        | AeroTech       | 32 x 107                  | 93                              | 51.1                                | NAR                    | Evet                      |
| S  | G12ST-P                       | AeroTech       | 29 x 156                  | 143.97                          | 82                                  | TRA                    | Hayır                     |
| R  | G25W-10A                      | AeroTech       | 29 x 124                  | 109.48                          | 97                                  | TRA                    | Evet                      |
| R  | <a href="#">G33</a> -5,7      | AeroTech       | 29 x 124                  | 100                             | 72.2                                | NAR                    | Hayır                     |
| R  | G33MY-9A                      | Cesaroni       | 29 x 187                  | 143.1                           | 79.1                                | CAR                    | Evet                      |
| S  | <a href="#">G38FJ</a> -4,7    | AeroTech       | 29 x 98                   | 94                              | 55                                  | NAR                    | Evet                      |
| S  | G39-6,10,P                    | Roadrunner     | 29 x 140                  | 103                             | 58.6                                | TRA                    | Hayır                     |
| S  | <a href="#">G40</a> -4,7      | Estes          | 29 x 124                  | 97.1                            | 55.1                                | NAR                    | Evet                      |
| S  | <a href="#">G40W</a> -4,7     | PML            | 29 x 124                  | 120                             | 55.1                                | NAR                    | Hayır                     |
| S  | <a href="#">G40W</a> -4,7,10  | AeroTech       | 29 x 124                  | 97.1                            | 55.1                                | NAR                    | Evet                      |
| S  | G45-6,10,P                    | Roadrunner     | 29 x 140                  | 110                             | 58.6                                | TRA                    | Hayır                     |
| R  | G46-11A                       | Cesaroni       | 38 x 127                  | 127.3                           | 62.5                                | CAR                    | Evet                      |
| R  | G50IM-15A                     | Cesaroni       | 38 x 127                  | 150                             | 77.7                                | CAR                    | Evet                      |
| R  | <a href="#">G53FJ</a> -5,7,10 | AeroTech       | 29 x 124                  | 90.9                            | 60                                  | NAR                    | Evet                      |
| R  | G54RL-12A                     | Cesaroni       | 29 x 187                  | 159.1                           | 86.5                                | CAR                    | Evet                      |
| R  | <a href="#">G54</a> -6,10,14  | AeroTech       | 29 x 124                  | 85                              | 46                                  | NAR                    | Evet                      |
| H  | (HP) G55-P                    | WCH            | 38 x 308                  | 150.6                           | 142cc                               | CAR                    | HPR                       |
| R  | G57CL-12A                     | Cesaroni       | 29 x 142                  | 107.8                           | 51.4                                | CAR                    | Evet                      |



|    |                               |            |          |          |       |     |       |
|----|-------------------------------|------------|----------|----------|-------|-----|-------|
| R  | G58WH-13A                     | Cesaroni   | 38 x 127 | 136.8    | 76.3  | CAR | Evet  |
| R  | G60-12A                       | Cesaroni   | 38 x 127 | 139.4    | 78.4  | TRA | HPR   |
| R  | G60-14A                       | Cesaroni   | 38 x 127 | 134.2    | 68.3  | CAR | HPR   |
| R  | G61W-S,M,L                    | AeroTech   | 38 x 106 | 110.5    | 61.5  | TRA | Evet  |
| H  | (HP) G63-P                    | SkyRipper  | 29 x 305 | 85       | 75cc  | TRA | HPR   |
| R  | <a href="#">G64</a> -4,8,10   | AeroTech   | 29 x 124 | 120      | 62.5  | NAR | Evet  |
| R  | G65WH/LB-8A                   | Cesaroni   | 24 x 228 | 144.3    | 80    | CAR | Evet  |
| R  | G66LR-15A                     | Loki       | 38 x 120 | 134.457  | 72    | TRA | Evet  |
| R  | G67R-S,M                      | AeroTech   | 38 x 106 | 110      | 60    | TRA | Evet  |
| R  | G68WH-13A                     | Cesaroni   | 29 x 142 | 107.8    | 59.9  | CAR | Evet  |
| R  | G69-12A                       | Cesaroni   | 38 x 127 | 128.8    | 62.5  | TRA | Evet  |
| R! | (HP) G69SK-14A                | Cesaroni   | 38 x 127 | 117.15   | 198   | TRA | HPR   |
| R! | (HP) G69SF-17A                | Loki       | 38 x 127 | 106.1    | 63    | TRA | HPR   |
| R  | <a href="#">G69N</a> -P       | AeroTech   | 38 x 106 | 136.7    | 62.2  | NAR | Evet  |
| H  | (HP) G69-P                    | SkyRipper  | 29 x 406 | 128      | 125cc | TRA | HPR   |
| R  | G70CT-18A                     | Loki       | 38 x 120 | 119.0677 | 60    | TRA | Evet  |
| R  | <a href="#">G71R</a> -4,7,10  | AeroTech   | 29 x 124 | 107      | 56.9  | NAR | Hayır |
| S! | G72DM-14A                     | AeroTech   | 29 x 131 | 105      | 62.5  | TRA | Hayır |
| S  | <a href="#">G74W</a> -4,6     | AeroTech   | 29 x 83  | 82.74    | 39.3  | NAR | Evet  |
| S! | (HP) G75M-13A                 | AeroTech   | 29 x 131 | 115.15   | 66.8  | TRA | HPR   |
| S! | (HP) G75M-4,7,10              | AeroTech   | 29 x 124 | 120.39   | 66.8  | TRA | HPR   |
| R  | G75J-S,M                      | AeroTech   | 29 x 194 | 135.6    | 104.3 | TRA | Evet  |
| R  | <a href="#">G76G</a> -4,7,10  | AeroTech   | 29 x 124 | 115      | 60    | NAR | Evet  |
| S  | <a href="#">G77R</a> -4,7,10  | AeroTech   | 29 x 146 | 102.9    | 58.1  | NAR | Evet  |
| R  | G77R-S,M                      | AeroTech   | 29 x 150 | 105      | 58    | TRA | Evet  |
| R  | G78BS-15A                     | Cesaroni   | 38 x 127 | 140.9    | 67    | TRA | Evet  |
| S  | <a href="#">G78G</a> -4,7,10  | AeroTech   | 29 x 146 | 109.9    | 59.7  | NAR | Evet  |
| R  | G79SS-13A                     | Cesaroni   | 38 x 127 | 129      | 100   | CAR | Evet  |
| S  | <a href="#">G79W</a> -4,7,10  | AeroTech   | 29 x 146 | 108      | 60.1  | NAR | Evet  |
| R  | G79W-S.M.L                    | AeroTech   | 29 x 150 | 108.6    | 62    | TRA | Evet  |
| S  | G80NT-14A                     | AeroTech   | 29 x 128 | 132.17   | 62.5  | TRA | Evet  |
| R! | (HP) G80SK-14A                | Cesaroni   | 29 x 142 | 92.9     | 50    | CAR | HPR   |
| R  | G80LW-17A                     | Loki       | 38 x 127 | 122.5    | 60    | TRA | Evet  |
| S  | <a href="#">G80T</a> -4,7     | PML        | 29 x 124 | 120      | 56.9  | NAR | Hayır |
| S  | <a href="#">G80</a> -4,7,10   | AeroTech   | 29 x 124 | 120      | 56.9  | NAR | Evet  |
| S  | <a href="#">G80</a> -4,7,10   | Roadrunner | 29 x 140 | 105.7    | 54.7  | NAR | Hayır |
| S  | <a href="#">G80T</a> -7,10    | Estes      | 29 x 128 | 136.6    | 62.5  | NAR | Evet  |
| S  | <a href="#">G80T</a> -7,10,13 | AeroTech   | 29 x 128 | 136.6    | 62.5  | NAR | Evet  |
| R  | (HP) G82W-S,M,L               | Kosdon/AT  | 29 x 206 | 141      | 84    | TRA | HPR   |
| R  | (HP) G83BS-14A                | Cesaroni   | 29 x 142 | 107.4    | 51.1  | CAR | HPR   |
| R  | (HP) G84GR-10A                | Cesaroni   | 24 x 228 | 131      | 77.3  | CAR | HPR   |
| R  | (HP) G88SS-11A                | Cesaroni   | 29 x 142 | 84.3     | 59    | CAR | HPR   |



|    |                                    |                |                       |                             |                                 |                    |                       |
|----|------------------------------------|----------------|-----------------------|-----------------------------|---------------------------------|--------------------|-----------------------|
| R  | (HP) G94IB-18A                     | Loki           | 38 x 120              | 121.1148                    | 62                              | TRA                | HPR                   |
| R! | (HP) G100SK-14A                    | Cesaroni       | 24 x 228              | 114.5                       | 63.3                            | CAR                | HPR                   |
| H  | (HP) G100-P                        | Contrail       | 38 x 407              | 146                         | 140cc                           | TRA                | HPR                   |
| R  | (HP) G104T-S,M,L                   | AeroTech       | 29 x 125              | 81.5                        | 43.9                            | TRA                | HPR                   |
| R! | (HP) G106SK-14A                    | Cesaroni       | 29 x 187              | 138.3                       | 75                              | CAR                | HPR                   |
| R  | (HP) G107WH-12A                    | Cesaroni       | 24 x 228              | 139.1                       | 75.7                            | CAR                | HPR                   |
| R  | (HP) G115-13A                      | Cesaroni       | 38 x 127              | 140.6                       | 61.8                            | CAR                | HPR                   |
| R  | (HP) G117WH-11A                    | Cesaroni       | 24 x 228              | 142.3                       | 79.1                            | CAR                | HPR                   |
| R  | (HP) G118BS-15A                    | Cesaroni       | 29 x 187              | 159.1                       | 76.7                            | CAR                | HPR                   |
| H  | (HP) G123-P                        | Contrail       | 38 x 407              | 142                         | 140cc                           | TRA                | HPR                   |
| S  | (HP) G125T-14A                     | AeroTech       | 29 x 127              | 124.807                     | 62                              | TRA                | HPR                   |
| R  | (HP) G125RL-14A                    | Cesaroni       | 29 x 187              | 159.6                       | 81.9                            | CAR                | HPR                   |
| H  | (HP) G125-P                        | SkyRipper      | 38 x 406              | 145                         | 120cc                           | TRA                | HPR                   |
| R  | (HP) G126WT-13A                    | Cesaroni       | 29 x 142              | 116                         | 52.1                            | CAR                | HPR                   |
| R  | (HP) G127RL-14A                    | Cesaroni       | 24 x 228              | 137.3                       | 70.5                            | CAR                | HPR                   |
| H  | (HP) G130-P                        | Contrail       | 38 x 407              | 100                         | 140cc                           | TRA                | HPR                   |
| R  | (HP) G131SS-14A                    | Cesaroni       | 29 x 187              | 125.2                       | 88.6                            | CAR                | HPR                   |
| R  | (HP) G135R-SML                     | Kosdon/AT      | 29 x 206              | 146                         | 90                              | TRA                | HPR                   |
| R  | <a href="#">(HP) G138T</a> -14a    | AeroTech       | 29 x 124              | 157.1                       | 70                              | NAR                | HPR                   |
| R  | <a href="#">(HP) G142</a> -6,10,14 | AeroTech       | 29 x 113              | 84.3                        | 38.6                            | NAR                | HPR                   |
| R  | (HP) G145PK-15A                    | Cesaroni       | 24 x 228              | 139.7                       | 66.7                            | CAR                | HPR                   |
| R  | (HP) G150BS-13A                    | Cesaroni       | 24 x 228              | 142.5                       | 65.9                            | CAR                | HPR                   |
| H  | (HP) G170PVC-P                     | Contrail       | 38 x 406              | 82.9                        | 140cc                           | TRA                | HPR                   |
| R  | (HP) G185-12A                      | Cesaroni       | 38 x 127              | 128                         | 62.1                            | CAR                | HPR                   |
| H  | (HP) G234-P                        | Contrail       | 38 x 414              | 118                         | 90cc                            | TRA                | HPR                   |
| R  | (HP) G250VM-14A                    | Cesaroni       | 29 x 142              | 110                         | 50.6                            | CAR                | HPR                   |
| H  | (HP) G300-P                        | Contrail       | 38 x 406              | 100                         | 90cc                            | TRA                | HPR                   |
| R  | (HP) G339-P                        | AeroTech       | 38 x 106              | 110                         | 48                              | TRA                | HPR                   |
|    | <b>Tip Tanımı</b>                  | <b>Üretici</b> | <b>Boyutları (mm)</b> | <b>İtici kuvvet (N-san)</b> | <b>İtici yakıt Ağırlığı (g)</b> | <b>Test Kurumu</b> | <b>Yarışma Onaylı</b> |
| S  | H13ST-P                            | AeroTech       | 29 x 214              | 211.1                       | 116.4                           | TRA                | HPR                   |
| R  | H42MY-10A                          | Cesaroni       | 29 x 231              | 186                         | 105.5                           | CAR                | HPR                   |
| S  | H45W-10A                           | AeroTech       | 38 x 203              | 289                         | 197                             | TRA                | HPR                   |
| S  | H45W-P                             | AeroTech       | 38 x 203              | 320                         | 180                             | TRA                | HPR                   |
| R  | H53MY-12A                          | Cesaroni       | 29 x 276              | 234.2                       | 131.9                           | CAR                | HPR                   |
| R  | H54WH/LB-10A                       | Cesaroni       | 29 x 187              | 167.7                       | 96.6                            | CAR                | HPR                   |
| S  | H55W-6,10,14                       | AeroTech       | 29 x 191              | 162.3                       | 99.7                            | TRA                | HPR                   |
| H  | H70-P                              | Propulsion     | 38 x 464              | 237                         | 217cc                           | CAR                | HPR                   |
| H  | H70-P                              | RATTworks      | 29 x 457              | 204.3                       | 135.8cc                         | TRA                | HPR                   |
| R  | H73J-S,M                           | AeroTech       | 38 x 152              | 185.6                       | 142.7                           | TRA                | HPR                   |
| H  | H78-P                              | SkyRipper      | 29 x 523              | 172.9                       | 185cc                           | TRA                | HPR                   |
| R  | H87IM-12A                          | Cesaroni       | 29 x 187              | 167.9                       | 92.7                            | CAR                | HPR                   |

|    |               |           |          |         |       |     |     |
|----|---------------|-----------|----------|---------|-------|-----|-----|
| R  | H90CL-12A     | Cesaroni  | 29 x 187 | 164.2   | 77.1  | CAR | HPR |
| R  | H90LR-14A     | Loki      | 38 x 177 | 234.4   | 120   | TRA | HPR |
| R  | H97J-S,M      | AeroTech  | 29 x 238 | 177.3   | 137.1 | TRA | HPR |
| S  | H100W-10A     | AeroTech  | 38 x 155 | 226.83  | 136   | TRA | HPR |
| R  | H100IM-15A    | Cesaroni  | 38 x 186 | 286.4   | 154.4 | CAR | HPR |
| R! | H100SF-17A    | Loki      | 38 x 177 | 201.5   | 120   | TRA | HPR |
| H  | H100-P        | WCH       | 38 x 403 | 247     | 189cc | CAR | HPR |
| R  | H110WH-14A    | Cesaroni  | 38 x 186 | 269.1   | 152.6 | CAR | HPR |
| R  | H112J-6,10,14 | AeroTech  | 38 x 191 | 261.1   | 191.2 | TRA | HPR |
| S! | H115DM-14A    | AeroTech  | 29 x 203 | 176.52  | 113   | TRA | HPR |
| R  | H118CL-12A    | Cesaroni  | 29 x 231 | 216.2   | 102.8 | CAR | HPR |
| R  | H120-14A      | Cesaroni  | 38 x 186 | 260.7   | 136.6 | CAR | HPR |
| H  | H121-P        | Contrail  | 38 x 508 | 225     | 185cc | TRA | HPR |
| R! | H123SK-12A    | Cesaroni  | 29 x 231 | 176.5   | 100   | CAR | HPR |
| R  | H123-14A      | Cesaroni  | 38 x 186 | 232.4   | 123   | CAR | HPR |
| R  | H123W-6,10,14 | AeroTech  | 38 x 152 | 223.6   | 119   | TRA | HPR |
| H  | H124-P        | SkyRipper | 38 x 533 | 225     | 220cc | TRA | HPR |
| R  | H125-12A      | Cesaroni  | 38 x 186 | 265.6   | 125   | CAR | HPR |
| R  | H125CT-18A    | Loki      | 38 x 390 | 240.428 | 122   | TRA | HPR |
| R  | H128W-S,M,L   | AeroTech  | 29 x 194 | 172.9   | 93.6  | TRA | HPR |
| R  | H130W-14A     | AeroTech  | 38 x 154 | 213.187 | 123   | TRA | HPR |
| R  | H130W-P       | Kosdon/AT | 29 x 291 | 247     | 140   | TRA | HPR |
| R  | H133BS-14A    | Cesaroni  | 29 x 187 | 163.3   | 76.7  | CAR | HPR |
| R  | H135WH-12A    | Cesaroni  | 29 x 231 | 216.7   | 119.8 | CAR | HPR |
| S  | H135W-14A     | AeroTech  | 29 x 216 | 225.84  | 82    | TRA | HPR |
| R  | H140CL-11A    | Cesaroni  | 29 x 276 | 268     | 128.5 | CAR | HPR |
| H  | H141-P        | Contrail  | 38 x 508 | 241     | 185cc | TRA | HPR |
| R  | H143SS-13A    | Cesaroni  | 38 x 186 | 247     | 187   | CAR | HPR |
| R  | H144LW-17A    | Loki      | 38 x 190 | 239.3   | 126   | TRA | HPR |
| R  | H148R-S,M,L   | AeroTech  | 38 x 152 | 206     | 122   | TRA | HPR |
| R  | H151RL-15A    | Cesaroni  | 29 x 231 | 207.2   | 109.1 | CAR | HPR |
| R  | H152BS-15A    | Cesaroni  | 38 x 185 | 275.9   | 137   | TRA | HPR |
| R  | H153-13A      | Cesaroni  | 38 x 186 | 258     | 143.9 | TRA | HPR |
| H  | H155-P        | SkyRipper | 38 x 533 | 229     | 220cc | TRA | HPR |
| R  | H159GR-15A    | Cesaroni  | 29 x 320 | 298.2   | 176.6 | CAR | HPR |
| R  | H160CL-12A    | Cesaroni  | 29 x 320 | 311.7   | 154.2 | CAR | HPR |
| R! | H160SK-14A    | Cesaroni  | 29 x 276 | 220.5   | 125   | CAR | HPR |
| R  | H160LB-15A    | Loki      | 38 x 177 | 260.1   | 120   | TRA | HPR |
| R  | H163WT-14A    | Cesaroni  | 29 x 187 | 166.3   | 78.2  | CAR | HPR |
| R  | H165R-M,L     | AeroTech  | 29 x 194 | 165     | 90    | TRA | HPR |
| S  | H169WS-13A    | AeroTech  | 29 x 221 | 232.95  | 112   | TRA | HPR |
| R! | H170M-14A     | AeroTech  | 38 x 192 | 319.9   | 182.5 | TRA | HPR |

|    |                                |          |          |        |       |     |     |
|----|--------------------------------|----------|----------|--------|-------|-----|-----|
| R  | H170BS-14A                     | Cesaroni | 29 x 231 | 217.1  | 102.3 | CAR | HPR |
| R  | H175SS-14A                     | Cesaroni | 29 x 231 | 166    | 118.1 | CAR | HPR |
| R! | H178DM-14A                     | AeroTech | 38 x 192 | 283    | 177   | TRA | HPR |
| R! | H180SK-14A                     | Cesaroni | 29 x 320 | 258    | 150   | CAR | HPR |
| R  | H180W-S,M,L                    | AeroTech | 29 x 238 | 217.7  | 125   | TRA | HPR |
| S  | H182R-14A                      | AeroTech | 29 x 203 | 216.78 | 115   | TRA | HPR |
| R  | H186RT-20A                     | Gorilla  | 38 x 249 | 312.12 | 178   | TRA | HPR |
| R  | H194RL-14A                     | Cesaroni | 29 x 276 | 260.3  | 136.4 | CAR | HPR |
| S  | H195NT-10A                     | AeroTech | 29 x 222 | 236.09 | 107   | TRA | HPR |
| R  | H200BS-14A                     | Cesaroni | 29 x 276 | 260.8  | 127.9 | CAR | HPR |
| H  | H200BS-P                       | Contrail | 54 x 762 | 269    | N/A   | TRA | HPR |
| R  | <a href="#">H210R</a> -10,P    | AeroTech | 29 x 238 | 220    | 110.8 | NAR | HPR |
| H  | H211                           | Contrail | 38 x 508 | 206    | 185cc | TRA | HPR |
| S  | H219T-14                       | AeroTech | 38 x 155 | 233    | 109   | TRA | HPR |
| R  | <a href="#">H220T</a> -6,10,14 | AeroTech | 29 x 238 | 220    | 106.4 | NAR | HPR |
| H  | H222-P                         | Contrail | 38 x 406 | 161    | 140cc | TRA | HPR |
| R  | H225-14A                       | Cesaroni | 38 x 186 | 273.2  | 123.6 | CAR | HPR |
| R! | H225BL-P                       | Gorilla  | 38 x 390 | 226    | 173   | TRA | HPR |
| R! | H226SK-14A                     | Cesaroni | 29 x 365 | 305    | 175   | CAR | HPR |
| R  | H233RL-14A                     | Cesaroni | 29 x 320 | 311.5  | 163.7 | CAR | HPR |
| R  | H237SS-13A                     | Cesaroni | 29 x 276 | 206.2  | 147.6 | CAR | HPR |
| R  | H238T-6,10,14                  | AeroTech | 29 x 194 | 165.5  | 85    | TRA | HPR |
| R  | H242T-6,10,14                  | AeroTech | 38 x 152 | 231.7  | 115   | TRA | HPR |
| H  | H246-P                         | Contrail | 38 x 508 | 222    | 185cc | TRA | HPR |
| H  | H248PVC-P                      | Contrail | 38 x 719 | 261.5  | 275cc | TRA | HPR |
| R  | H250G-S,M,L                    | AeroTech | 29 x 239 | 219.5  | 120   | TRA | HPR |
| R  | H255BS-14A                     | Cesaroni | 29 x 320 | 315.4  | 153.4 | CAR | HPR |
| R  | H255WT-14A                     | Cesaroni | 29 x 231 | 229.3  | 104.3 | CAR | HPR |
| R  | <a href="#">H268R</a> -10,14,P | AeroTech | 29 x 333 | 320    | 166   | NAR | HPR |
| H  | H277-P                         | Contrail | 38 x 712 | 292    | 370cc | TRA | HPR |
| S  | H283ST-7,11,15                 | AeroTech | 38 x 155 | 201    | 97    | TRA | HPR |
| R  | H295SS-13A                     | Cesaroni | 29 x 320 | 252.7  | 177.1 | CAR | HPR |
| H  | H300-P                         | Contrail | 38 x 508 | 161    | 185cc | TRA | HPR |
| H  | H303-P                         | Contrail | 38 x 508 | 170    | 185cc | TRA | HPR |
| R  | H340SS-14A                     | Cesaroni | 29 x 365 | 287.3  | 206.7 | CAR | HPR |
| H  | H340-P                         | Contrail | 38 x 719 | 304.5  | 275cc | TRA | HPR |
| R  | H399WT-12A                     | Cesaroni | 29 x 320 | 282.2  | 132.6 | CAR | HPR |
| R  | H400-13A                       | Cesaroni | 38 x 186 | 255    | 122.4 | TRA | HPR |
| R  | H410VM-14A                     | Cesaroni | 29 x 187 | 167.7  | 75.9  | CAR | HPR |
| R  | H500-17A                       | Loki     | 38 x 295 | 317    | 156   | TRA | HPR |
| S  | H550ST-14A                     | AeroTech | 38 x 206 | 312.06 | 176   | TRA | HPR |
| R  | H550ST-14A                     | AeroTech | 38 x 193 | 309.98 | 154   | TRA | HPR |

|    |                         |                |                       |                             |                                 |                    |                       |
|----|-------------------------|----------------|-----------------------|-----------------------------|---------------------------------|--------------------|-----------------------|
| R  | H565-A                  | Cesaroni       | 38 x 245              | 319.8                       | 165                             | CAR                | HPR                   |
| R  | H669-P                  | AeroTech       | 38 x 152              | 221                         | 98                              | TRA                | HPR                   |
| R  | H999-P                  | AeroTech       | 38 x 203              | 319.9                       | 147                             | TRA                | HPR                   |
|    | <b>Tip Tanımı</b>       | <b>Üretici</b> | <b>Boyutları (mm)</b> | <b>İtici kuvvet (N-san)</b> | <b>İtici yakıt Ağırlığı (g)</b> | <b>Test Kurumu</b> | <b>Yarışma Onaylı</b> |
| S  | I40N-P                  | AeroTech       | 39 x 203              | 374.9                       | 197                             | TRA                | HPR                   |
| R  | <a href="#">I49N-P</a>  | AeroTech       | 38 x 184              | 383                         | 190.8                           | NAR                | HPR                   |
| R  | I55MY-9A                | Cesaroni       | 38 x 245              | 395                         | 223.8                           | CAR                | HPR                   |
| R  | <a href="#">I59WN-P</a> | AeroTech       | 38 x 232              | 486                         | 251.7                           | NAR                | HPR                   |
| S  | I65W-10A                | AeroTech       | 54 x 218              | 634.97                      | 377                             | TRA                | HPR                   |
| S  | <a href="#">I65W-P</a>  | AeroTech       | 54 x 235              | 630.5                       | 369.7                           | NAR                | HPR                   |
| H  | I80-P                   | Propulsion     | 38 x 646              | 460                         | 383cc                           | CAR                | HPR                   |
| H  | I80-P                   | RATTworks      | 29 x 730              | 360                         | 276cc                           | TRA                | HPR                   |
| H  | I90L-P                  | RATTworks      | 29 x 921              | 493.8                       | 361cc                           | TRA                | HPR                   |
| R  | I100RL/LB-17A           | Cesaroni       | 54 x 236              | 613.6                       | 350.1                           | CAR                | HPR                   |
| R  | I110LW-M,L              | Loki           | 38 x 305              | 487                         | 289                             | TRA                | HPR                   |
| H  | I110-P                  | WCH            | 38 x 606              | 499.7                       | 334cc                           | CAR                | HPR                   |
| R  | I115W-S,M,L             | AeroTech       | 54 x 156              | 409.3                       | 229                             | TRA                | HPR                   |
| H  | I117-P                  | SkyRipper      | 38 x 914              | 592                         | 580cc                           | TRA                | HPR                   |
| R  | I117FJ-S,M,L            | AeroTech       | 54 x 156              | 364.9                       | 253                             | TRA                | HPR                   |
| H  | I119-P                  | SkyRipper      | 38 x 711              | 407                         | 400cc                           | TRA                | HPR                   |
| R  | I120IM-15A              | Cesaroni       | 54 x 143              | 501.8                       | 263.1                           | CAR                | HPR                   |
| R  | I125WH/LB-10A           | Cesaroni       | 38 x 367              | 566.6                       | 335                             | CAR                | HPR                   |
| H  | I130(300CC098J)-P       | Hypertek       | 54 x 546              | 470.6                       | 300cc                           | TRA                | HPR                   |
| H  | I136(300CC098J2)-P      | Hypertek       | 54 x 546              | 507                         | 300cc                           | TRA                | HPR                   |
| S  | I140W-14A               | AeroTech       | 38 x 203              | 335.53                      | 183                             | TRA                | HPR                   |
| R! | I140SK-14A              | Cesaroni       | 54 x 143              | 395.6                       | 210.4                           | CAR                | HPR                   |
| H  | I145FX(300CC098JFX)-P   | Hypertek       | 54 x 546              | 541                         | 300cc                           | TRA                | HPR                   |
| H  | I147-P                  | SkyRipper      | 38 x 711              | 519                         | 400cc                           | TRA                | HPR                   |
| R  | I150BS-11A              | Cesaroni       | 54 x 152              | 465.1                       | 224                             | TRA                | HPR                   |
| R  | I154J-6,10              | AeroTech       | 38 x 241              | 378                         | 252.8                           | TRA                | HPR                   |
| H  | I155HP-P                | Contrail       | 38 x 719              | 541                         | 370cc                           | TRA                | HPR                   |
| H  | I160-P                  | Propulsion     | 38 x 646              | 484                         | 383cc                           | CAR                | HPR                   |
| R  | I161W-S,M,L             | AeroTech       | 38 x 191              | 328.7                       | 178.6                           | TRA                | HPR                   |
| R  | I165CS-17A              | Cesaroni       | 54 x 69               | 518.2                       | 230.1                           | CAR                | HPR                   |
| R  | I170G-10A               | AeroTech       | 54 x 174              | 418.54                      | 227                             | TRA                | HPR                   |
| R  | I170-14a                | Cesaroni       | 38 x 245              | 382                         | 187.5                           | CAR                | HPR                   |
| R  | I170S-L                 | Kosdon/AT      | 38 x 314              | 374                         | 182                             | TRA                | HPR                   |
| S  | I175WS-13A              | AeroTech       | 38 x 203              | 333                         | 168                             | TRA                | HPR                   |
| R  | I175WH-14A              | Cesaroni       | 38 x 245              | 411.4                       | 228.9                           | CAR                | HPR                   |
| R  | I180W-14A               | AeroTech       | 38 x 201              | 325.584                     | 186                             | TRA                | HPR                   |
| R! | I180SK-14A              | Cesaroni       | 38 x 245              | 338.43                      | 394                             | TRA                | HPR                   |

|    |                                |           |          |         |       |     |     |
|----|--------------------------------|-----------|----------|---------|-------|-----|-----|
| R  | I195-16A                       | Cesaroni  | 38 x 245 | 396.2   | 204.9 | CAR | HPR |
| R  | <a href="#">I195WW</a> -18     | Animal    | 38 x 249 | 358     | 192.2 | NAR | HPR |
| R  | I195J-6,10,14                  | AeroTech  | 38 x 299 | 426.1   | 272   | TRA | HPR |
| R  | I200W-6,10,14                  | AeroTech  | 29 x 333 | 324.5   | 186.5 | TRA | HPR |
| R  | I204IM-13A                     | Cesaroni  | 29 x 320 | 347.7   | 185.4 | CAR | HPR |
| R  | I205-13A                       | Cesaroni  | 38 x 245 | 380.9   | 206.1 | TRA | HPR |
| S  | I205W-14A                      | AeroTech  | 29 x 304 | 339.342 | 207   | TRA | HPR |
| H  | I205(300CC125J)-P              | Hypertek  | 54 x 546 | 469     | 300cc | TRA | HPR |
| R  | I210LR-14A                     | Loki      | 38 x 292 | 489.8   | 240   | TRA | HPR |
| H  | I210-P                         | Contrail  | 38 x 915 | 497     | 550cc | TRA | HPR |
| R  | I211W-6,10,14                  | AeroTech  | 38 x 248 | 441.6   | 238   | TRA | HPR |
| R  | I212SS-14A                     | Cesaroni  | 38 x 245 | 364     | 275   | CAR | HPR |
| R  | I215R-S,M,L                    | AeroTech  | 54 x 156 | 397     | 208   | TRA | HPR |
| R  | I216CL(D)-14A                  | Cesaroni  | 38 x 367 | 636.1   | 312.5 | CAR | HPR |
| R  | I218WT-14A                     | Cesaroni  | 54 x 152 | 491.2   | 230   | TRA | HPR |
| R  | <a href="#">I218R</a> -6,14,P  | AeroTech  | 38 x 203 | 330     | 172.7 | NAR | HPR |
| R! | <a href="#">I220SK</a> -20     | Animal    | 38 x 249 | 358     | 201.9 | NAR | HPR |
| H  | I221-P                         | Contrail  | 38 x 712 | 370     | 370cc | TRA | HPR |
| H  | I222(300CC125J2)-P             | Hypertek  | 54 x 546 | 519     | 300cc | TRA | HPR |
| R! | I223SK-14A                     | Cesaroni  | 38 x 303 | 434.05  | 494   | TRA | HPR |
| R  | I223GT-20A                     | Gorilla   | 38 x 249 | 327.93  | 181   | TRA | HPR |
| R  | I224CL-15A                     | Cesaroni  | 29 x 365 | 381.5   | 182.5 | CAR | HPR |
| R  | I225FJ-6,10,14                 | AeroTech  | 38 x 250 | 368     | 264   | TRA | HPR |
| H  | I225FX(300CC125JFX)-P          | Hypertek  | 54 x 546 | 527.5   | 300cc | TRA | HPR |
| R  | I229T-S,M,L                    | AeroTech  | 54 x 156 | 411     | 206   | TRA | HPR |
| R  | I235WC-P                       | Gorilla   | 38 x 249 | 324     | 313   | TRA | HPR |
| R  | I236BS-17A                     | Cesaroni  | 38 x 243 | 413     | 204   | TRA | HPR |
| R  | I240-15A                       | Cesaroni  | 38 x 303 | 555.8   | 279   | TRA | HPR |
| R  | I242WH-15A                     | Cesaroni  | 38 x 303 | 548.2   | 305.2 | CAR | HPR |
| R  | I243WH-13A                     | Cesaroni  | 29 x 365 | 381.7   | 212.1 | CAR | HPR |
| R  | I245G-S,M,L                    | AeroTech  | 38 x 201 | 334.07  | 187   | TRA | HPR |
| H  | I247WS-P                       | Contrail  | 54 x 711 | 637     | N/A   | TRA | HPR |
| H  | <a href="#">I250</a> -P        | Alpha     | 54 x 711 | 540     | 353.8 | NAR | HPR |
| H  | I250HP-P                       | Contrail  | 38 x 719 | 430     | 275cc | TRA | HPR |
| R  | I255-16A                       | Cesaroni  | 38 x 303 | 517.3   | 273.2 | CAR | HPR |
| H  | I260(440CC172J)-P              | Hypertek  | 54 x 614 | 570.4   | 440cc | TRA | HPR |
| R  | <a href="#">I271BB</a> -20     | Animal    | 38 x 258 | 390     | 188.7 | NAR | HPR |
| S! | I280DM-14A                     | AeroTech  | 38 x 355 | 561.44  | 355   | TRA | HPR |
| R  | I280F-L                        | Kosdon/AT | 38 x 314 | 382     | 182   | TRA | HPR |
| R  | I284W-6,10,14                  | AeroTech  | 38 x 299 | 607.3   | 315.9 | TRA | HPR |
| R  | <a href="#">I285R</a> -10,14,P | AeroTech  | 38 x 250 | 420     | 230.2 | NAR | HPR |
| R  | I285-15A                       | Cesaroni  | 38 x 303 | 510.1   | 272.4 | TRA | HPR |

|      |                               |           |          |          |       |     |     |
|------|-------------------------------|-----------|----------|----------|-------|-----|-----|
| R    | <a href="#">I285GG-20</a>     | Animal    | 38 x 258 | 353      | 206.5 | NAR | HPR |
| R    | I287SS-15A                    | Cesaroni  | 38 x 303 | 486      | 363   | CAR | HPR |
| H    | I290-P                        | Contrail  | 38 x 922 | 430      | 460cc | TRA | HPR |
| R!   | I297SK-15A                    | Cesaroni  | 38 x 367 | 542.8    | 591   | TRA | HPR |
| R    | <a href="#">I300T-6,10,14</a> | AeroTech  | 38 x 250 | 440      | 221.6 | NAR | HPR |
| R(a) | <a href="#">I301W-18</a>      | Kosdon/AT | 38 x 640 | 554      | 310   | NAR | HPR |
| R    | I303BS-16A                    | Cesaroni  | 38 x 302 | 537.6    | 270   | TRA | HPR |
| R    | I305FJ-6,10,14                | AeroTech  | 38 x 299 | 452      | 330   | TRA | HPR |
| H    | I307-P                        | Contrail  | 38 x 915 | 573      | 550cc | TRA | HPR |
| H    | I310(440CC172J)               | Hypertek  | 54 x 645 | 574.5    | 440cc | TRA | HPR |
| R    | I310S-S,L,P                   | Kosdon/AT | 38 x 368 | 633.8    | 316.3 | TRA | HPR |
| R!   | <a href="#">I315SK-20</a>     | Animal    | 38 x 370 | 572      | 333.7 | NAR | HPR |
| R!   | I316SF-17A                    | Loki      | 38 x 292 | 432.2    | 240   | TRA | HPR |
| R    | I324RT-20A                    | Gorilla   | 38 x 370 | 526.46   | 299   | TRA | HPR |
| R    | <a href="#">I325WW-18</a>     | Animal    | 38 x 370 | 594      | 316.8 | NAR | HPR |
| R!   | I327DM-14A                    | AeroTech  | 38 x 337 | 539      | 354   | TRA | HPR |
| H    | I333-P                        | Contrail  | 38 x 922 | 556      | 460cc | TRA | HPR |
| R    | I345-15A                      | Cesaroni  | 38 x 245 | 408.58   | 185.4 | CAR | HPR |
| S    | I350R-10                      | AeroTech  | 38 x 355 | 634      | 348   | TRA | HPR |
| R    | I350SS-16A                    | Cesaroni  | 38 x 367 | 601      | 413   | CAR | HPR |
| R    | I357T-S,M,L                   | AeroTech  | 38 x 203 | 342      | 170   | TRA | HPR |
| R    | I360-15A                      | Cesaroni  | 38 x 367 | 625.5    | 334.6 | TRA | HPR |
| R    | I364FJ-6,10,14                | AeroTech  | 38 x 337 | 570      | 396   | TRA | HPR |
| R    | I366R-M,L                     | AeroTech  | 38 x 299 | 539      | 300   | TRA | HPR |
| R    | I370F-P                       | Kosdon/AT | 38 x 368 | 634.3    | 316.9 | TRA | HPR |
| R    | <a href="#">I375GG-20</a>     | Animal    | 38 x 370 | 596      | 340.2 | NAR | HPR |
| R    | I377CT-18A                    | Loki      | 38 x 640 | 522.2865 | 250   | TRA | HPR |
| R    | I389GT-20A                    | Gorilla   | 38 x 370 | 553.15   | 303   | TRA | HPR |
| R!   | I392BL-18A                    | Gorilla   | 38 x 370 | 446.12   | 270   | TRA | HPR |
| R    | I396LS-17A                    | Loki      | 38 x 406 | 611      | 372   | TRA | HPR |
| H    | I400-P                        | Contrail  | 38 x 922 | 432      | 550cc | TRA | HPR |
| R    | I405LW-17A                    | Loki      | 38 x 305 | 493.2    | 252   | TRA | HPR |
| R    | I430LB-15A                    | Loki      | 38 x 292 | 532.6    | 240   | TRA | HPR |
| R    | I435T-6,10,14                 | AeroTech  | 38 x 299 | 568.9    | 273   | TRA | HPR |
| R    | I450F-L                       | Kosdon/AT | 38 x 368 | 633      | 302   | TRA | HPR |
| R    | I455VM-16A                    | Cesaroni  | 54 x 143 | 474.9    | 212.7 | CAR | HPR |
| R    | I462WC-18A                    | Gorilla   | 38 x 370 | 556.73   | 292   | TRA | HPR |
| R    | I470-15A                      | Cesaroni  | 38 x 303 | 540.1    | 247.2 | CAR | HPR |
| S    | I500T-14A                     | AeroTech  | 38 x 355 | 614.45   | 312   | TRA | HPR |
| H    | I500-P                        | Contrail  | 38 x 712 | 336      | 275cc | TRA | HPR |
| R    | I540WT-16A                    | Cesaroni  | 38 x 367 | 635      | 269.4 | CAR | HPR |
| R(a) | <a href="#">I550R-20</a>      | Kosdon/AT | 38 x 640 | 575      | 295   | NAR | HPR |

|    |                           |                |                       |                             |                                 |                    |                       |
|----|---------------------------|----------------|-----------------------|-----------------------------|---------------------------------|--------------------|-----------------------|
| R  | I566-16A                  | Cesaroni       | 38 x 245              | 370                         | 183.6                           | CAR                | HPR                   |
| R  | I599N-P                   | AeroTech       | 54 x 156              | 404.9                       | 195                             | TRA                | HPR                   |
| R  | I600R-M                   | AeroTech       | 38 x 337              | 597.3                       | 330                             | TRA                | HPR                   |
| H  | I727-P                    | Contrail       | 38 x 922              | 611                         | 410cc                           | TRA                | HPR                   |
| H  | I747-P                    | Contrail       | 38 x 719              | 431                         | 225cc                           | TRA                | HPR                   |
| R  | I800-16A                  | Cesaroni       | 38 x 303              | 419                         | 221                             | CAR                | HPR                   |
| R  | I1299N-P                  | AeroTech       | 38 x 250              | 422                         | 192                             | TRA                | HPR                   |
|    | <b>Tip Tanımı</b>         | <b>Üretici</b> | <b>Boyutları (mm)</b> | <b>İtici kuvvet (N-san)</b> | <b>İtici yakıt Ağırlığı (g)</b> | <b>Test Kurumu</b> | <b>Yarışma Onaylı</b> |
| R  | J90W-S,M,L                | AeroTech       | 54 x 243              | 707.3                       | 426                             | TRA                | HPR                   |
| R  | J94MY-P                   | Cesaroni       | 38 x 367              | 644                         | 372.9                           | CAR                | HPR                   |
| R  | J99N-P                    | AeroTech       | 54 x 244              | 945.2                       | 556                             | TRA                | HPR                   |
| H  | J115(440CC076J)-P         | Hypertek       | 54 x 614              | 474                         | 440cc                           | TRA                | HPR                   |
| H  | J120FX(440CC076JFX)-P     | Hypertek       | 54 x 614              | 758                         | 440cc                           | TRA                | HPR                   |
| S  | J135W-S,M,L               | AeroTech       | 54 x 368              | 1069                        | 663                             | TRA                | HPR                   |
| R  | J140WH/LB-P               | Cesaroni       | 54 x 329              | 1210.6                      | 680                             | CAR                | HPR                   |
| H  | J140-P                    | Propulsion     | 38 x 881              | 664                         | 596cc                           | CAR                | HPR                   |
| H  | J144-P                    | SkyRipper      | 38 x 914              | 699                         | 580cc                           | TRA                | HPR                   |
| R! | J145SK-19A                | Cesaroni       | 54 x 236              | 699.1                       | 417                             | CAR                | HPR                   |
| R  | J150MY-P                  | Cesaroni       | 38 x 500              | 949.2                       | 567.7                           | CAR                | HPR                   |
| H  | J150-P                    | Contrail       | 38 x 922              | 654                         | 550cc                           | TRA                | HPR                   |
| H  | J160-P                    | RATTworks      | 38 x 1219             | 667                         | 490cc                           | TRA                | HPR                   |
| R  | J167WC-P                  | Gorilla        | 54 x 326              | 950                         | 600                             | TRA                | HPR                   |
| H  | J170(440CC098J)-P         | Hypertek       | 54 x 614              | 728                         | 440cc                           | TRA                | HPR                   |
| R  | J175LW-PS                 | Loki           | 54 x 330              | 1146                        | 630                             | TRA                | HPR                   |
| R  | J180T-S,M,L               | AeroTech       | 54 x 230              | 764                         | 437.1                           | TRA                | HPR                   |
| H  | J190FX(440CC098JFX)-P     | Hypertek       | 54 x 614              | 827                         | 440cc                           | TRA                | HPR                   |
| R  | J210-16A                  | Cesaroni       | 54 x 236              | 836                         | 396                             | CAR/NAR            | HPR                   |
| H  | J220(440CC110J)-P         | Hypertek       | 54 x 645              | 721                         | 440cc                           | TRA                | HPR                   |
| H  | J222-P                    | Contrail       | 38 x 1227             | 928                         | 830cc                           | TRA                | HPR                   |
| R! | <a href="#">J230SK</a> -P | Animal         | 54 x 326              | 995                         | 525.7                           | NAR                | HPR                   |
| H  | J234-P                    | Contrail       | 54 x 922              | 1033                        | 910cc                           | TRA                | HPR                   |
| R  | J240-16A                  | Cesaroni       | 54 x 236              | 806                         | 446                             | CAR                | HPR                   |
| H  | J242-P                    | Contrail       | 38 x 1220             | 752                         | 830cc                           | TRA                | HPR                   |
| R  | J244WH-14A                | Cesaroni       | 54 x 236              | 867.2                       | 472.1                           | CAR                | HPR                   |
| H  | J245-P                    | Contrail       | 54 x 719              | 644                         | 530cc                           | TRA                | HPR                   |
| H  | J246-P                    | Contrail       | 38 x 922              | 673                         | 550cc                           | TRA                | HPR                   |
| S  | J250W-14                  | AeroTech       | 54 x 218              | 704                         | 363                             | TRA                | HPR                   |
| R! | J250SK-15A                | Cesaroni       | 54 x 236              | 682.8                       | 406                             | TRA                | HPR                   |
| H  | J250-P                    | Contrail       | 38 x 711              | 430                         | 370cc                           | TRA                | HPR                   |
| H  | J250(440CC125J)-P         | Hypertek       | 54 x 614              | 744.5                       | 440cc                           | TRA                | HPR                   |
| R  | J250FJ-S,M,L,XL           | AeroTech       | 54 x 241              | 711.6                       | 511                             | TRA                | HPR                   |



|    |                          |           |           |        |       |     |     |
|----|--------------------------|-----------|-----------|--------|-------|-----|-----|
| H  | J261G-P                  | SkyRipper | 54 x 727  | 1248   | 830cc | TRA | HPR |
| H  | J263G-P                  | SkyRipper | 54 x 607  | 844    | 550cc | TRA | HPR |
| R  | J270GR-13A               | Cesaroni  | 38 x 367  | 650.3  | 376   | CAR | HPR |
| S  | J270W-14A                | AeroTech  | 38 x 355  | 703.39 | 381   | TRA | HPR |
| H  | J270FX(440CC125JFX)-P    | Hypertek  | 54 x 614  | 802.2  | 440cc | TRA | HPR |
| H  | J272-P                   | Conrail   | 54 x 922  | 1065.5 | 910cc | TRA | HPR |
| R  | J275W-S,M,L,XL           | AeroTech  | 54 x 230  | 774    | 472   | TRA | HPR |
| H  | J277WS-P                 | Conrail   | 54 x 914  | 1031   | N/A   | TRA | HPR |
| R  | J280SS-16A               | Cesaroni  | 54 x 236  | 716.5  | 512   | CAR | HPR |
| R  | J285-15A                 | Cesaroni  | 38 x 360  | 684    | 327   | CAR | HPR |
| R  | J290WH-15A               | Cesaroni  | 38 x 367  | 683.6  | 381.5 | CAR | HPR |
| H  | J292-P                   | Conrail   | 54 x 719  | 734    | 530cc | TRA | HPR |
| R  | J293BS-13A               | Cesaroni  | 54 x 236  | 837.8  | 414   | TRA | HPR |
| R  | J295-16A                 | Cesaroni  | 54 x 320  | 1196.3 | 594   | CAR | HPR |
| H  | J295FX(440CC172JFX)-P    | Hypertek  | 54 x 552  | 655    | 440cc | TRA | HPR |
| R  | J300-15A                 | Cesaroni  | 38 x 360  | 694    | 345.4 | TRA | HPR |
| R  | J300LR-PS                | Loki      | 54 x 327  | 1208   | 620   | TRA | HPR |
| R  | J315R-L,P                | AeroTech  | 54 x 230  | 763.3  | 438   | TRA | HPR |
| H  | J315-P                   | Hypertek  | 81 x 552  | 998.8  | 440cc | TRA | HPR |
| R  | J316PK-17A               | Cesaroni  | 38 x 367  | 654.3  | 337.9 | CAR | HPR |
| R  | J325-P                   | Cesaroni  | 54 x 326  | 1099   | 537   | CAR | HPR |
| R  | J326LR-15A               | Loki      | 38 x 417  | 733    | 360   | TRA | HPR |
| R  | J330-16A                 | Cesaroni  | 38 x 419  | 765    | 392   | CAR | HPR |
| H  | J330FX(835CC172JFX)-P    | Hypertek  | 81 x 552  | 1051   | 835cc | TRA | HPR |
| H  | J333-P                   | Conrail   | 38 x 1220 | 752    | 830cc | TRA | HPR |
| R  | J335-15A                 | Cesaroni  | 38 x 367  | 649.2  | 341.5 | CAR | HPR |
| H  | J335BG-P                 | Conrail   | 54 x 719  | 679    | 530cc | TRA | HPR |
| H  | J337B-P                  | SkyRipper | 54 x 727  | 1073   | 830cc | TRA | HPR |
| R! | J340M-14A                | AeroTech  | 38 x 336  | 651.7  | 365   | TRA | HPR |
| H  | J345-P                   | Conrail   | 38 x 1227 | 891    | 735cc | TRA | HPR |
| H  | J348B-P                  | SkyRipper | 54 x 607  | 716    | 550cc | TRA | HPR |
| R! | J350SF-PS                | Loki      | 54 x 327  | 931    | 574   | TRA | HPR |
| R  | J350W(0.5""core)"-S,M,L  | AeroTech  | 38 x 337  | 670.1  | 361.1 | TRA | HPR |
| R  | J350W(.425 core)-S,M,L   | AeroTech  | 38 x 337  | 697.4  | 381.1 | TRA | HPR |
| R  | J354WH-16A               | Cesaroni  | 38 x 421  | 818.7  | 457.8 | CAR | HPR |
| R  | J355-16A                 | Cesaroni  | 54 x 329  | 1189.5 | 669   | CAR | HPR |
| H  | J355-P                   | Conrail   | 54 x 712  | 678.9  | 530cc | TRA | HPR |
| R  | J357BS-17A               | Cesaroni  | 38 x 360  | 657.6  | 338   | TRA | HPR |
| R  | <a href="#">J357WW-P</a> | Animal    | 54 x 326  | 1000   | 548.1 | NAR | HPR |
| H  | J358-P                   | Conrail   | 54 x 922  | 913.9  | 910cc | TRA | HPR |
| R  | J360-15A                 | Cesaroni  | 38 x 419  | 826    | 413.1 | TRA | HPR |
| R! | J360SK-16A               | Cesaroni  | 54 x 320  | 1015.9 | 606   | TRA | HPR |

|    |                           |           |            |         |       |     |     |
|----|---------------------------|-----------|------------|---------|-------|-----|-----|
| R! | <a href="#">J365SK-P</a>  | Animal    | 54 x 403   | 1125    | 702.3 | NAR | HPR |
| R! | J365BL-P                  | Gorilla   | 54 x 326   | 852     | 498   | TRA | HPR |
| R  | <a href="#">J370GG-P</a>  | Animal    | 54 x 326   | 1040    | 598.3 | NAR | HPR |
| R  | J380SS-16A                | Cesaroni  | 54 x 320   | 1043    | 769   | CAR | HPR |
| R! | J381SK-15A                | Cesaroni  | 38 x 421   | 659.9   | 688   | TRA | HPR |
| R  | J394GR-13A                | Cesaroni  | 38 x 500   | 970.4   | 572.1 | CAR | HPR |
| R  | J395-P                    | Cesaroni  | 54 x 326   | 1079.3  | 573   | CAR | HPR |
| R  | J395RT-P                  | Gorilla   | 54 x 326   | 1026    | 524   | TRA | HPR |
| R  | J400SS-16A                | Cesaroni  | 38 x 419   | 700     | 490   | CAR | HPR |
| R  | <a href="#">J400RR-P</a>  | Animal    | 54 x 326   | 1100    | 558   | NAR | HPR |
| R  | J400-P                    | Cesaroni  | 54 x 326   | 976.9   | 723   | CAR | HPR |
| R  | J401FJ-S,M,L              | AeroTech  | 54 x 314   | 1115.4  | 730   | TRA | HPR |
| R  | J405S-L                   | Kosdon/AT | 38 x 476   | 722     | 367   | TRA | HPR |
| R  | J410-16A                  | Cesaroni  | 38 x 421   | 773.8   | 409.8 | CAR | HPR |
| R  | J415W-S,M,L               | AeroTech  | 54 x 314   | 1232    | 697   | TRA | HPR |
| H  | J416-P                    | Contrail  | 54 x 922   | 1130    | 910cc | TRA | HPR |
| R  | J420CL-15A                | Cesaroni  | 38 x 500   | 1007.8  | 479.6 | CAR | HPR |
| R  | J420R-S,M,L               | AeroTech  | 38 x 337   | 658     | 345   | TRA | HPR |
| S  | J425R-14A                 | AeroTech  | 38 x 356   | 675.51  | 359   | TRA | HPR |
| S  | J425R-14A                 | AeroTech  | 38 x 356   | 680.33  | 631   | TRA | HPR |
| R  | J425BS-16A                | Cesaroni  | 38 x 419   | 783.9   | 406   | TRA | HPR |
| R  | J430WT-18A                | Cesaroni  | 54 x 236   | 821.1   | 384   | CAR | HPR |
| S  | J435WS-14A                | AeroTech  | 38 x 356.5 | 774.1   | 352   | TRA | HPR |
| R  | <a href="#">J440BB-20</a> | Animal    | 38 x 370   | 653     | 313.1 | NAR | NAR |
| R  | J440BB-P                  | Animal    | 54 x 326   | 1109    | 528.4 | CAR | HPR |
| R  | J449BS-15A                | Cesaroni  | 54 x 320   | 1260.5  | 624   | TRA | HPR |
| S! | J450DM-14                 | AeroTech  | 54 x 359   | 1055    | 510   | TRA | HPR |
| R  | <a href="#">J450ST-P</a>  | Animal    | 54 x 326   | 1070    | 533.1 | NAR | HPR |
| R! | J450BL-P                  | Gorilla   | 54 x 402   | 1121    | 658   | TRA | HPR |
| R  | J453WH-16A                | Cesaroni  | 38 x 500   | 1012.6  | 585.5 | CAR | HPR |
| R  | J460T-S,M,L               | AeroTech  | 54 x 230   | 806     | 386   | TRA | HPR |
| R  | J465GT-P                  | Gorilla   | 54 x 326   | 1023    | 566   | TRA | HPR |
| S  | J466SW-14A                | AeroTech  | 38 x 356.5 | 774.1   | 352   | TRA | HPR |
| R  | J474CT-6,12,18            | Loki      | 38 x 740   | 709.1   | 360   | TRA | HPR |
| R  | J475BkBr-P                | Animal    | 54 x 326   | 976.9   | 723   | CAR | HPR |
| R  | J475BB-P                  | Animal    | 54 x 403   | 1233.4  | 704.5 | CAR | HPR |
| R  | <a href="#">J480BB-P</a>  | Animal    | 54 x 326   | 1165    | 556   | NAR | HPR |
| R  | J485WC-PS                 | Gorilla   | 54 x 326   | 1059.7  | 552   | TRA | HPR |
| R  | J500ST-20A                | Animal    | 38 x 370   | 660     | 327   | TRA | HPR |
| R  | J500G-S,M,L               | AeroTech  | 38 x 344   | 693.35  | 375   | TRA | HPR |
| R  | J510WL-L                  | AeroTech  | 38 x 584   | 1162.36 | 662   | TRA | HPR |
| R  | J520W-13A                 | AeroTech  | 38 x 480   | 671.3   | 381   | TRA | HPR |

|                   |                   |                |                       |                             |                                 |                    |                       |
|-------------------|-------------------|----------------|-----------------------|-----------------------------|---------------------------------|--------------------|-----------------------|
| R!                | J520SK-16A        | Cesaroni       | 38 x 510              | 848                         | 498                             | TRA                | HPR                   |
| R                 | J520W-P           | AeroTech       | 38 x 1080             | 730.6                       | 381                             | TRA                | HPR                   |
| R                 | J520F-S,M,L       | AeroTech       | 38 x 368              | 645.93                      | 327                             | TRA                | HPR                   |
| R                 | J525LW-PS         | Loki           | 54 x 330              | 1112.5                      | 625                             | TRA                | HPR                   |
| R                 | J528LW-17A        | Loki           | 38 x 419              | 741                         | 374                             | TRA                | HPR                   |
| R                 | J530IM-15A        | Cesaroni       | 38 x 500              | 1115.5                      | 576.5                           | CAR                | HPR                   |
| R                 | J535BT-P          | Gorilla        | 54 x 327              | 1113.799                    | 590                             | TRA                | HPR                   |
| R                 | J540R-S,M,L,P     | AeroTech       | 54 x 314              | 1161                        | 679                             | TRA                | HPR                   |
| H                 | J555-P            | Contrail       | 38 x 1220             | 795                         | 735cc                           | TRA                | HPR                   |
| R                 | J570W-S,M,L       | AeroTech       | 38 x 479              | 973                         | 535.8                           | TRA                | HPR                   |
| R                 | J575FJ-S,M,L      | AeroTech       | 38 x 479              | 805                         | 519                             | TRA                | HPR                   |
| R                 | J580SS-17A        | Cesaroni       | 38 x 510              | 896.3                       | 550                             | TRA                | HPR                   |
| R                 | J595BS-16A        | Cesaroni       | 38 x 510              | 985                         | 510                             | TRA                | HPR                   |
| R                 | J600RL-16A        | Cesaroni       | 38 x 510              | 998.6                       | 688                             | TRA                | HPR                   |
| R                 | J605F-L           | Kosdon/AT      | 38 x 476              | 737                         | 367                             | TRA                | HPR                   |
| R                 | J607WC-18A        | Gorilla        | 38 x 370              | 677.94                      | 360                             | TRA                | HPR                   |
| R                 | J615ST-20A        | AeroTech       | 54 x 852              | 745.45                      | 370.5                           | TRA                | HPR                   |
| H                 | J642-P            | Contrail       | 54 x 922              | 1092.6                      | 910cc                           | TRA                | HPR                   |
| R!                | J650SF-15A        | Loki           | 38 x 1200             | 942                         | 573                             | TRA                | HPR                   |
| R                 | J712LB-15A        | Loki           | 38 x 406              | 751.9                       | 372                             | TRA                | HPR                   |
| R(a)              | J740G-P           | AeroTech       | 38 x 640              | 682                         | 308                             | TRA                | HPR                   |
| R                 | J745-P            | Cesaroni       | 54 x 326              | 1196.4                      | 549                             | CAR                | HPR                   |
| R                 | J760WT-19A        | Cesaroni       | 54 x 329              | 1265.7                      | 576                             | CAR                | HPR                   |
| H                 | J800-P            | Contrail       | 38 x 1227             | 928                         | 685cc                           | TRA                | HPR                   |
| R                 | J800T-S,M,L,XL    | AeroTech       | 54 x 314              | 1229.1                      | 619.4                           | TRA                | HPR                   |
| R                 | J825R-M           | AeroTech       | 38 x 479              | 970                         | 497                             | TRA                | HPR                   |
| R                 | J1000LW-7,9,12,15 | Loki           | 38 x 625              | 1220                        | 573                             | TRA                | HPR                   |
| R                 | J1026CT-14A       | Loki           | 38 x 625              | 1266.86                     | 616                             | TRA                | HPR                   |
| R                 | J1055-17A         | Cesaroni       | 54 x 236              | 746.6                       | 358                             | CAR                | HPR                   |
| R                 | J1299N-P          | AeroTech       | 54 x 230              | 845                         | 371.6                           | TRA                | HPR                   |
| R                 | J1365-P           | Cesaroni       | 54 x 326              | 932.4                       | 444                             | CAR                | HPR                   |
| R                 | J1423N-P          | AeroTech       | 54 x 230              | 845                         | 371.6                           | TRA                | HPR                   |
| R                 | J1520-17A         | Cesaroni       | 54 x 329              | 1092.5                      | 1026                            | CAR                | HPR                   |
| R                 | J1720-P           | Animal         | 54 x 403              | 1176.2                      | 592                             | CAR                | HPR                   |
| R                 | J1799N-PS         | AeroTech       | 54 x 314              | 1066.11                     | 540                             | TRA                | HPR                   |
| R                 | J2135N-P          | AeroTech       | 54 x 314              | 1261                        | 557.4                           | TRA                | HPR                   |
| <b>Tip Tanımı</b> |                   | <b>Üretici</b> | <b>Boyutları (mm)</b> | <b>İtici kuvvet (N-san)</b> | <b>İtici yakıt Ağırlığı (g)</b> | <b>Test Kurumu</b> | <b>Yarışma Onaylı</b> |
| S                 | K76WN-P           | AeroTech       | 54 x 368              | 1349.8                      | 840                             | TRA                | HPR                   |
| R                 | K160CL-6          | Cesaroni       | 54 x 404              | 1525.5                      | 772                             | CAR                | HPR                   |
| R                 | K185W-S,M,L       | AeroTech       | 54 x 437              | 1417.2                      | 836.8                           | TRA                | HPR                   |
| R                 | K222WC-P          | Gorilla        | 54 x 402              | 1315                        | 800                             | TRA                | HPR                   |

|    |                            |           |           |         |              |     |     |
|----|----------------------------|-----------|-----------|---------|--------------|-----|-----|
| H  | K234-P                     | Contrail  | 54 x 1220 | 1657    | 1490cc       | TRA | HPR |
| R  | K235WC-P                   | Gorilla   | 75 x 368  | 2049    | 1189         | TRA | HPR |
| H  | K240(835CC125J)-P          | Hypertek  | 81 x 552  | 1292    | 835cc        | TRA | HPR |
| H  | K240H-P                    | RATTworks | 64 x 908  | 1844.7  | 1507cc       | TRA | HPR |
| S  | K250W-P                    | AeroTech  | 54 x 673  | 2484    | 1543         | TRA | HPR |
| S  | K250W (LMS)-P              | AeroTech  | 54 x 649  | 2342    | 1400         | TRA | HPR |
| R  | K250LWM-PS                 | Loki      | 54 x 499  | 1607    | 938          | TRA | HPR |
| H  | K257G-P                    | SkyRipper | 54 x 912  | 1733    | 1130cc       | TRA | HPR |
| R  | K260CL-P                   | Cesaroni  | 54 x 572  | 2285.1  | 1149.3       | CAR | HPR |
| R  | K261WH/LB-P                | Cesaroni  | 54 x 488  | 2020.9  | 1151.9       | CAR | HPR |
| H  | K265SP-P                   | Contrail  | 54 x 1219 | 1684    | 1490cc       | TRA | HPR |
| R  | K270W-S,M,L,XL             | AeroTech  | 54 x 579  | 1968    | 1188         | TRA | HPR |
| R  | K300CL-P                   | Cesaroni  | 54 x 649  | 2546    | 1265.7       | CAR | HPR |
| H  | K300-P                     | Contrail  | 75 x 1016 | 1909    | 2050cc       | TRA | HPR |
| H  | K321-P                     | Contrail  | 54 x 1220 | 1570    | 1490cc       | TRA | HPR |
| R  | K327WC-P                   | Gorilla   | 54 x 491  | 1616    | 1000         | TRA | HPR |
| H  | K347B-P                    | SkyRipper | 54 x 912  | 1529    | 1130cc       | TRA | HPR |
| T  | K350TR-P                   | RATTworks | 64 x 914  | 1861    | 1170cc/250ml | TRA | HPR |
| R  | K350LWM-PS                 | Loki      | 54 x 736  | 2374    | 1400         | TRA | HPR |
| R  | K360WH-13A                 | Cesaroni  | 54 x 329  | 1280.9  | 708.2        | CAR | HPR |
| R  | <a href="#">K365RR</a> -P  | Animal    | 75 x 244  | 1675    | 946          | NAR | HPR |
| R  | K375WP-P                   | AeroTech  | 54 x 570  | 2228.14 | 1292         | TRA | HPR |
| S  | K400C-14                   | AeroTech  | 54 x 359  | 1304    | 650          | TRA | HPR |
| R  | K400GR-14A                 | Cesaroni  | 54 x 404  | 1596.7  | 924.3        | CAR | HPR |
| R  | K400S-S,M,L                | Kosdon/AT | 54 x 403  | 1386.2  | 721.8        | TRA | HPR |
| H  | K404-P                     | Contrail  | 75 x 1016 | 2441    | 2050cc       | TRA | HPR |
| R! | K411BL-PS                  | Gorilla   | 75 x 368  | 1785.75 | 1132         | TRA | HPR |
| R  | K445-17A                   | Cesaroni  | 54 x 404  | 1636.3  | 792          | CAR | HPR |
| R  | <a href="#">K450BB</a> -PS | Animal    | 75 x 244  | 1845    | 881.6        | NAR | HPR |
| R! | K454SK-19A                 | Cesaroni  | 54 x 404  | 1363.7  | 769.2        | CAR | HPR |
| S  | K455NW-17A                 | AeroTech  | 54 x 635  | 2327.9  | 1361         | TRA | HPR |
| R  | K455-P                     | Cesaroni  | 54 x 403  | 1483    | 716          | CAR | HPR |
| H  | K456-P                     | Contrail  | 75 x 813  | 1628    | 1400cc       | TRA | HPR |
| R  | K458W-P                    | AeroTech  | 98 x 275  | 2464.6  | 1425         | TRA | HPR |
| H  | K460-P                     | WCH       | 75 x 762  | 1988    | 1493cc       | CAR | HPR |
| R! | K465DM-14A                 | AeroTech  | 54 x 401  | 1281    | 866          | TRA | HPR |
| R  | K470ST-P                   | Animal    | 75 x 302  | 1679    | 826          | TRA | HPR |
| R  | K470WC-P                   | Gorilla   | 54 x 728  | 2450    | 1400         | TRA | HPR |
| R  | <a href="#">K475WW</a> -P  | Animal    | 54 x 403  | 1400    | 728.6        | NAR | HPR |
| R  | K480W-PS                   | AeroTech  | 54 x 570  | 2273.26 | 1318         | TRA | HPR |
| R  | K490GR-16A                 | Cesaroni  | 54 x 488  | 1978.4  | 1155.4       | CAR | HPR |
| R  | K500-18A                   | Cesaroni  | 54 x 404  | 1595.6  | 892          | CAR | HPR |

|    |                           |           |           |          |              |     |     |
|----|---------------------------|-----------|-----------|----------|--------------|-----|-----|
| R! | <a href="#">K500SK-P</a>  | Animal    | 75 x 368  | 1811     | 1123.5       | NAR | HPR |
| H  | K500SP-P                  | Contrail  | 54 x 1524 | 2237     | N/A          | TRA | HPR |
| R  | K510-P                    | Cesaroni  | 75 x 350  | 2486     | 1197         | CAR | HPR |
| R  | K513FJ-S,M,L,XL           | AeroTech  | 54 x 410  | 1496.3   | 974          | TRA | HPR |
| R! | K515SK-16A                | Cesaroni  | 38 x 500  | 1653.9   | 961.5        | CAR | HPR |
| R  | K520WH-17A                | Cesaroni  | 54 x 404  | 1710.5   | 944          | CAR | HPR |
| R  | K520RT-P                  | Gorilla   | 54 x 401  | 1356     | 698          | TRA | HPR |
| H  | K525WS-P                  | Contrail  | 54 x 1219 | 1620     | N/A          | TRA | HPR |
| R  | K527LR-P                  | Loki      | 54 x 492  | 1983     | 1015         | TRA | HPR |
| R  | K530SS-16A                | Cesaroni  | 54 x 404  | 1412     | 1025         | CAR | HPR |
| R  | <a href="#">K530GG-P</a>  | Animal    | 54 x 403  | 1410     | 796.7        | NAR | HPR |
| R! | K533BL-P                  | Gorilla   | 54 x 491  | 1420     | 900          | TRA | HPR |
| S  | K535W-14A                 | AeroTech  | 54 x 358  | 1421.535 | 1264         | TRA | HPR |
| S  | K535W-14A                 | AeroTech  | 54 x 358  | 1414.766 | 770          | TRA | HPR |
| R  | K535-P                    | Cesaroni  | 54 x 403  | 1441.8   | 764          | CAR | HPR |
| R! | K540M-14A                 | AeroTech  | 54 x 401  | 1596.3   | 876.7        | TRA | HPR |
| H  | K543BS-P                  | Contrail  | 76 x 813  | 2096     | 1450cc       | TRA | HPR |
| R  | K550W-S,M,L,XL            | AeroTech  | 54 x 410  | 1568     | 889.1        | TRA | HPR |
| R! | <a href="#">K555SK-P</a>  | Animal    | 54 x 492  | 1300     | 862          | NAR | HPR |
| R  | K555WH-P                  | Cesaroni  | 75 x 350  | 2406.2   | 1407         | CAR | HPR |
| H  | K555BG-P                  | Contrail  | 54 x 1220 | 1687     | 1490cc       | TRA | HPR |
| R  | K555GT-P                  | Gorilla   | 54 x 401  | 1397     | 780          | TRA | HPR |
| R  | <a href="#">K560RR-P</a>  | Animal    | 54 x 430  | 1480     | 750          | NAR | HPR |
| R  | K560W-PS                  | AeroTech  | 75 x 396  | 2511     | 1425         | TRA | HPR |
| R  | K570-17A                  | Cesaroni  | 54 x 488  | 2062.9   | 990          | CAR | HPR |
| R  | <a href="#">K570WW-P</a>  | Animal    | 54 x 492  | 1700     | 914.6        | NAR | HPR |
| R  | K575SS-P                  | Cesaroni  | 75 x 395  | 2493     | 1803         | CAR | HPR |
| R  | K590-15A                  | Cesaroni  | 54 x 572  | 2397.6   | 1169         | CAR | HPR |
| R  | K600WH-17A                | Cesaroni  | 54 x 488  | 2129.8   | 1180         | CAR | HPR |
| T  | K600TR-P                  | RATTworks | 64 x 1219 | 2170     | 1476cc/370ml | TRA | HPR |
| R  | <a href="#">K600WW-PS</a> | Animal    | 75 x 368  | 2500     | 1223.3       | NAR | HPR |
| R  | K600F-S,M,L,P             | Kosdon/AT | 54 x 403  | 1428.5   | 724.3        | TRA | HPR |
| R  | <a href="#">K605RR-P</a>  | Animal    | 75 x 368  | 2410     | 1231         | NAR | HPR |
| R! | K610SK-P                  | Animal    | 54 x 491  | 1531     | 861          | CAR | HPR |
| R  | K627LR-5,7,11,14          | Loki      | 38 x 1200 | 1518.691 | 688          | TRA | HPR |
| R  | K630BS-15A                | Cesaroni  | 54 x 404  | 1679.4   | 912          | TRA | HPR |
| H  | K630-P                    | Contrail  | 75 x 813  | 1341     | 1400cc       | TRA | HPR |
| R  | K630WC-PS                 | Gorilla   | 54 x 403  | 1414.8   | 736          | TRA | HPR |
| R  | K635-17A                  | Cesaroni  | 54 x 488  | 1994.4   | 1115         | CAR | HPR |
| R  | K650SS-16A                | Cesaroni  | 54 x 488  | 1749.5   | 1281         | CAR | HPR |
| R  | K650PK-21A                | Cesaroni  | 54 x 488  | 1997.1   | 1135         | CAR | HPR |
| R  | K650T-P                   | AeroTech  | 98 x 289  | 2405.7   | 1280         | TRA | HPR |

|      |                          |           |           |          |        |     |     |
|------|--------------------------|-----------|-----------|----------|--------|-----|-----|
| R    | <a href="#">K650RR-P</a> | Animal    | 54 x 492  | 1840     | 931    | NAR | HPR |
| H    | K654BS-P                 | Contrail  | 75 x 711  | 2132     | 1400cc | TRA | HPR |
| R    | K660-17A                 | Cesaroni  | 54 x 572  | 2437     | 1177   | CAR | HPR |
| R    | K661BS-P                 | Cesaroni  | 75 x 350  | 2430.4   | 1182   | CAR | HPR |
| R    | K665-P                   | Cesaroni  | 54 x 403  | 1379.9   | 964    | CAR | HPR |
| R    | <a href="#">K670GG-P</a> | Animal    | 54 x 492  | 1751     | 1014   | NAR | HPR |
| R    | K670-P                   | Cesaroni  | 54 x 491  | 1806.1   | 955    | CAR | HPR |
| R    | K670WC-PS                | Gorilla   | 75 x 368  | 2364.72  | 1184   | TRA | HPR |
| R!   | K675SK-18A               | Cesaroni  | 54 x 572  | 2009.6   | 1140   | CAR | HPR |
| H    | K678-P                   | Contrail  | 75 x 1016 | 1847     | 2050cc | TRA | HPR |
| R    | K680R-P                  | AeroTech  | 98 x 289  | 2358     | 1316   | TRA | HPR |
| R!   | K690SF-PS                | Loki      | 54 x 483  | 1616     | 920    | TRA | HPR |
| R    | K695R-M,L,P              | AeroTech  | 54 x 410  | 1514     | 903    | TRA | HPR |
| R    | K695BT-P                 | Gorilla   | 54 x 403  | 1463.04  | 681    | TRA | HPR |
| R    | K700W-P                  | AeroTech  | 54 x 568  | 2261     | 1303   | TRA | HPR |
| R    | <a href="#">K700BB-P</a> | Animal    | 54 x 430  | 1650     | 745    | NAR | HPR |
| R    | K700-P                   | Cesaroni  | 54 x 491  | 1659.6   | 1205   | CAR | HPR |
| R    | K700RT-P                 | Gorilla   | 54 x 492  | 1691     | 856    | TRA | HPR |
| H    | K707-P                   | Contrail  | 75 x 813  | 1386     | 1400cc | TRA | HPR |
| R    | K710BB-P                 | Animal    | 54 x 491  | 1791.4   | 880.7  | CAR | HPR |
| R    | K711WH-18A               | Cesaroni  | 54 x 572  | 2377.2   | 1398   | CAR | HPR |
| R!   | K735SK-P                 | Cesaroni  | 75 x 350  | 1955.2   | 1173   | CAR | HPR |
| R    | K740CS-18A               | Cesaroni  | 54 x 404  | 1873.9   | 846.2  | CAR | HPR |
| R    | K750-18A                 | Cesaroni  | 54 x 572  | 2352.5   | 1321   | CAR | HPR |
| R(a) | <a href="#">K750W-P</a>  | Kosdon/AT | 54 x 727  | 2468     | 1315   | NAR | HPR |
| R    | K763GT-P                 | Gorilla   | 54 x 491  | 1740.27  | 975    | TRA | HPR |
| H    | K777-P                   | Contrail  | 75 x 1017 | 1833     | 2050cc | TRA | HPR |
| R    | K780BS-15A               | Cesaroni  | 54 x 488  | 2107.8   | 1140   | TRA | HPR |
| R    | K780R-P                  | AeroTech  | 75 x 395  | 2371     | 1268   | TRA | HPR |
| R    | <a href="#">K800BB-P</a> | Animal    | 54 x 492  | 1950     | 914    | NAR | HPR |
| R    | K805G-P                  | AeroTech  | 54 x 401  | 1762     | 871.1  | TRA | HPR |
| R    | K805WC-PS                | Gorilla   | 54 x 492  | 1765     | 920    | TRA | HPR |
| R!   | K815SK-P                 | Cesaroni  | 54 x 649  | 2303.7   | 1342.1 | CAR | HPR |
| R    | K820BS-17A               | Cesaroni  | 54 x 572  | 2383     | 1164   | CAR | HPR |
| R    | K828BT-P                 | Gorilla   | 54 x 492  | 1786.141 | 966    | TRA | HPR |
| R    | K828FJ-S,M,L,XL          | AeroTech  | 54 x 579  | 2052.15  | 1450   | TRA | HPR |
| R!   | K830SF-PS                | Loki      | 54 x 726  | 2287     | 1376   | TRA | HPR |
| R!   | K850DM-16A               | AeroTech  | 54 x 549  | 1863.13  | 1224   | TRA | HPR |
| R    | K855-P                   | Cesaroni  | 54 x 491  | 1725.2   | 1205   | CAR | HPR |
| H    | K888BM-P                 | Contrail  | 76 x 1016 | 2400     | 2050cc | TRA | HPR |
| R    | K940WT-18A               | Cesaroni  | 54 x 404  | 1632.7   | 768    | CAR | HPR |
| R    | <a href="#">K950ST-P</a> | Animal    | 54 x 492  | 1860     | 887.4  | NAR | HPR |



|      |                             |           |          |         |        |     |     |
|------|-----------------------------|-----------|----------|---------|--------|-----|-----|
| R    | K960LWB-PS                  | Loki      | 54 x 499 | 1946    | 960    | TRA | HPR |
| R    | <a href="#">K975WW</a> -PS  | Animal    | 54 x 728 | 2450    | 1357.3 | NAR | HPR |
| S!   | <a href="#">K990DM</a> -14A | AeroTech  | 54 x 610 | 1867.13 | 1224   | NAR | HPR |
| R    | K1000S-P                    | Kosdon/AT | 54 x 728 | 2592.7  | 1301   | TRA | HPR |
| R    | K1000T-PS                   | AeroTech  | 75 x 383 | 2511.5  | 1234   | TRA | HPR |
| R!   | <a href="#">K1000SK</a> -PS | Animal    | 54 x 728 | 2120    | 1297   | NAR | HPR |
| R    | K1050W-PS                   | AeroTech  | 54 x 598 | 2426.4  | 1265   | TRA | HPR |
| R    | <a href="#">K1075GG</a> -P  | Animal    | 54 x 728 | 2400    | 1399.9 | NAR | HPR |
| R!   | K1075SK-P                   | Cesaroni  | 54 x 728 | 2245.1  | 1259   | CAR | HPR |
| R    | K1075RT-P                   | Gorilla   | 54 x 728 | 2413    | 1314   | TRA | HPR |
| R    | K1085WT-P                   | Cesaroni  | 75 x 350 | 2412    | 1199   | CAR | HPR |
| R    | K1100T-S,M,L,XL             | AeroTech  | 54 x 398 | 1472    | 771    | TRA | HPR |
| R    | K1103X-14A                  | AeroTech  | 54 x 401 | 1789.5  | 830    | TRA | HPR |
| R    | K1127LB-14A                 | Loki      | 38 x 625 | 1284.61 | 624    | TRA | HPR |
| R    | K1130BB-P                   | Animal    | 54 x 728 | 2550.7  | 1334   | CAR | HPR |
| R    | K1185GT-P                   | Gorilla   | 54 x 728 | 2460    | 1314   | TRA | HPR |
| R    | K1200-16A                   | Cesaroni  | 54 x 488 | 2014    | 960    | CAR | HPR |
| R    | K1250WW-P                   | Animal    | 54 x 491 | 1950.9  | 915    | CAR | HPR |
| R    | K1275R-P                    | AeroTech  | 54 x 568 | 2224.9  | 1170   | TRA | HPR |
| R    | K1440-17A                   | Cesaroni  | 54 x 572 | 2437    | 1129   | CAR | HPR |
| R    | K1499N-P                    | AeroTech  | 75 x 260 | 1321    | 604    | TRA | HPR |
| R    | K1620-P                     | Cesaroni  | 98 x 240 | 2436.9  | 1193   | CAR | HPR |
| R    | K1720-P                     | Cesaroni  | 54 x 403 | 1176.2  | 592    | CAR | HPR |
| R(a) | <a href="#">K1750R</a> -P   | Kosdon/AT | 54 x 727 | 2423    | 1253   | NAR | HPR |
| R    | K1999N-P                    | AeroTech  | 98 x 275 | 2540    | 1225   | TRA | HPR |
| R    | K2000VM-P                   | Cesaroni  | 75 x 350 | 2329.9  | 1102   | CAR | HPR |
| R    | K2045-17A                   | Cesaroni  | 54 x 404 | 1407.6  | 716    | CAR | HPR |
| R    | K2050ST-PS                  | AeroTech  | 54 x 381 | 1384.74 | 674    | TRA | HPR |

|   | <b>Tip Tanımı</b>      | <b>Üretici</b> | <b>Boyutları (mm)</b> | <b>İtici kuvvet (N-san)</b> | <b>İtici yakıt Ağırlığı (g)</b> | <b>Test Kurumu</b> | <b>Yarışma Onaylı</b> |
|---|------------------------|----------------|-----------------------|-----------------------------|---------------------------------|--------------------|-----------------------|
| H | L200(1685CC098L)-P     | Hypertek       | 75 x 1031             | 2639                        | 1685cc                          | TRA                | HPR                   |
| H | L225FX(1685CC098LFX)-P | Hypertek       | 75 x 1031             | 2789                        | 1685cc                          | TRA                | HPR                   |
| R | L265MY-P               | Cesaroni       | 54 x 649              | 2644.6                      | 1603                            | CAR                | HPR                   |
| R | L339N-P                | AeroTech       | 98 x 302              | 2793                        | 1796                            | TRA                | HPR                   |
| H | L350(1685CC125L)-P     | Hypertek       | 75 x 1031             | 3042.9                      | 1685cc                          | TRA                | HPR                   |
| H | L355FX(1685CC125LFX)-P | Hypertek       | 75 x 1031             | 2851                        | 1685cc                          | TRA                | HPR                   |
| H | L369-P                 | Contrail       | 75 x 1347             | 3829                        | 3200cc                          | TRA                | HPR                   |
| R | L395MY-P               | Cesaroni       | 75 x 757              | 4936.8                      | 3423                            | CAR                | HPR                   |
| R | L400W-PS               | AeroTech       | 98 x 444              | 4654.6                      | 2696                            | TRA                | HPR                   |
| R | L425WC-P               | Gorilla        | 75 x 3500             | 3372                        | 1750                            | TRA                | HPR                   |
| H | L475(1685CC172L)-P     | Hypertek       | 75 x 1031             | 2774                        | 1685cc                          | TRA                | HPR                   |
| R | L480LR-P               | Loki           | 76 x 498              | 3203.4                      | 1830                            | TRA                | HPR                   |



|    |                            |           |             |          |        |     |     |
|----|----------------------------|-----------|-------------|----------|--------|-----|-----|
| H  | L535FX(1685CC172LFX)-P     | Hypertek  | 75 x 1031   | 2994     | 1685cc | TRA | HPR |
| H  | L540(2800CC172L)-P         | Hypertek  | 75 x 1387   | 4615     | 2800cc | TRA | HPR |
| H  | L550(1685CCRGL)-P          | Hypertek  | 75 x 1031   | 3095     | 1685cc | TRA | HPR |
| H  | L570FX(2800CC172LFX)-P     | Hypertek  | 75 x 1387   | 4716     | 2800cc | TRA | HPR |
| H  | L575(2800CCRGL)-P          | Hypertek  | 75 x 1387   | 4831     | 2800cc | TRA | HPR |
| R  | L585IM-P                   | Cesaroni  | 75 x 350    | 2653.4   | 1449.8 | CAR | HPR |
| H  | L600-P                     | RATTworks | 64 x 1066   | 3152     | 1858cc | TRA | HPR |
| H  | L600-P                     | WCH       | 75 x 1016   | 3161     | 2363cc | CAR | HPR |
| R  | L610-P                     | Cesaroni  | 98 x 394    | 4842     | 2415   | CAR | HPR |
| H  | L610FX(1685CCRGLFX)-P      | Hypertek  | 75 x 1031   | 3131     | 1682cc | TRA | HPR |
| H  | L625FX(2800CCRGLFX)-P      | Hypertek  | 75 x 1387   | 4951     | 2800cc | TRA | HPR |
| R  | L640DT-P                   | Cesaroni  | 54 x 649    | 2772.2   | 1293   | CAR | HPR |
| R  | L645GR-P                   | Cesaroni  | 75 x 486    | 3419.8   | 2072   | CAR | HPR |
| R! | <a href="#">L666SK</a> -P  | Animal    | 75 x 870    | 2700     | 1646.7 | NAR | HPR |
| R  | L695BL-P                   | Gorilla   | 75 x 497    | 2669     | 1650   | TRA | HPR |
| R  | <a href="#">L700BB</a> -PS | Animal    | 75 x 368    | 2590     | 1193.9 | NAR | HPR |
| R  | L730-P                     | Cesaroni  | 54 x 649    | 2765     | 1351   | CAR | HPR |
| H  | L740FX(2800CC200MFX)-P     | Hypertek  | 75 x 1438   | 5033     | 2800cc | TRA | HPR |
| R  | <a href="#">L777WW</a> -PS | Animal    | 75 x 497    | 3140     | 1762.3 | NAR | HPR |
| R! | L780SF-PS                  | Loki      | 76 x 498    | 3006     | 1772   | TRA | HPR |
| R  | L789RT-PS                  | Gorilla   | 75 x 498    | 3251.78  | 1796   | TRA | HPR |
| R  | L800-P                     | Cesaroni  | 75 x 486    | 3759     | 1795   | CAR | HPR |
| H  | L800-P                     | Contrail  | 75 x 1372   | 3759     | 3200cc | TRA | HPR |
| R  | L805WH-P                   | Cesaroni  | 54 x 649    | 2833     | 1640   | CAR | HPR |
| R! | L820SK-P                   | Cesaroni  | 75 x 486    | 2945.6   | 1760   | CAR | HPR |
| R  | L840CT-P                   | Loki      | 75 x 499    | 3889.93  | 2074   | TRA | HPR |
| R  | L850W-P                    | AeroTech  | 75 x 531    | 3642     | 2075   | TRA | HPR |
| R  | L851WH-P                   | Cesaroni  | 75 x 486    | 3683.2   | 2110   | CAR | HPR |
| S! | L875DM-PS                  | AeroTech  | 54 x 653    | 3887.4   | 2608   | TRA | HPR |
| R  | L890SS-P                   | Cesaroni  | 75 x 530    | 3762     | 2670   | CAR | HPR |
| R  | <a href="#">L900RR</a> -P  | Animal    | 75 x 497    | 3450     | 1771   | NAR | HPR |
| R! | L900DM-PS                  | AeroTech  | 75 x 653    | 3787     | 2594   | TRA | HPR |
| R  | L910CS-P                   | Cesaroni  | 75 x 350    | 2856.1   | 1270   | CAR | HPR |
| R  | L930LWB-PS                 | Loki      | 75 x 499    | 3587     | 1836   | TRA | HPR |
| R  | L935IM-P                   | Cesaroni  | 54 x 649    | 3146.8   | 1567   | CAR | HPR |
| R  | L952W-PS                   | AeroTech  | 98 x 427    | 4656     | 2749.7 | TRA | HPR |
| H  | L970(2800CC300M)-P         | Hypertek  | 75 x 1438   | 5098     | 2800cc | TRA | HPR |
| R  | L985-P                     | Cesaroni  | 54 x 728    | 2664.6   | 1295   | CAR | HPR |
| R  | L985GT-PS                  | Gorilla   | 75 x 497.84 | 3580     | 1875   | TRA | HPR |
| R  | L990BS-P                   | Cesaroni  | 54 x 649    | 2771     | 1369.4 | CAR | HPR |
| R  | L995RL-P                   | Cesaroni  | 75 x 486    | 3618     | 1912.5 | CAR | HPR |
| S  | L1000W-18A                 | AeroTech  | 54 x 635    | 2666.327 | 1484   | TRA | HPR |

|    |                             |           |           |         |        |     |     |
|----|-----------------------------|-----------|-----------|---------|--------|-----|-----|
| R  | L1000S-P                    | Kosdon/AT | 54 x 728  | 2592    | 1301   | TRA | HPR |
| R  | L1030-P                     | Cesaroni  | 54 x 649  | 2787.9  | 1516   | CAR | HPR |
| R! | L1040DM-PS                  | AeroTech  | 75 x 653  | 3769    | 2602   | TRA | HPR |
| R  | L1040R-PS                   | Loki      | 54 x 727  | 3707.7  | 1746   | TRA | HPR |
| R  | L1050BS-P                   | Cesaroni  | 75 x 786  | 3727    | 1774   | CAR | HPR |
| R  | <a href="#">L1060GG</a> -PS | Animal    | 75 x 497  | 3622.6  | 1917.8 | NAR | HPR |
| R! | L1065BL-BS                  | Gorilla   | 75 x 787  | 4209.66 | 5329   | TRA | HPR |
| R  | <a href="#">L1080BB</a> -P  | Animal    | 75 x 497  | 3700    | 1717   | NAR | HPR |
| R  | L1090SS-P                   | Cesaroni  | 75 x 665  | 4815    | 3490.3 | CAR | HPR |
| R  | L1090W-PS                   | AeroTech  | 54 x 623  | 2671.28 | 1468   | TRA | HPR |
| R  | <a href="#">L1100RR</a> -PS | Animal    | 54 x 728  | 2576    | 1346   | NAR | HPR |
| R  | L1111ST-P                   | Animal    | 75 x 497  | 3480    | 1642   | TRA | HPR |
| R  | L1115-P                     | Cesaroni  | 75 x 621  | 5015    | 2394   | CAR | HPR |
| R  | L1150R-P                    | AeroTech  | 75 x 530  | 3517    | 1902   | TRA | HPR |
| R  | L1150WC-PS                  | Gorilla   | 75 x 498  | 3575.7  | 1974   | TRA | HPR |
| R  | L1170FJ-PS                  | AeroTech  | 75 x 665  | 4229    | 2805   | TRA | HPR |
| H! | L1222SF-P                   | Contrail  | 75 x 1524 | 3895    | 3200cc | TRA | HPR |
| R! | L1250DM-P                   | AeroTech  | 75 x 801  | 4374    | 2565   | TRA | HPR |
| R  | L1256WS-P                   | AeroTech  | 75 x 561  | 3784.98 | 1827   | TRA | HPR |
| R  | L1276RR-PS                  | Animal    | 54 x 728  | 2729    | 1475   | TRA | HPR |
| R! | L1290SK-P                   | Cesaroni  | 76 x 785  | 4701.1  | 2705   | CAR | HPR |
| R  | L1300R-P                    | AeroTech  | 98 x 443  | 4567    | 2632   | TRA | HPR |
| R  | <a href="#">L1300BB</a> -PS | Animal    | 54 x 728  | 2672    | 1314   | NAR | HPR |
| R  | L1350CS-P                   | Cesaroni  | 75 x 486  | 4263.1  | 1905   | CAR | HPR |
| R  | L1355SP-P                   | Cesaroni  | 75 x 621  | 4025.5  | 3012.4 | CAR | HPR |
| R  | L1365M-PS                   | AeroTech  | 75 x 665  | 4780    | 2648   | TRA | HPR |
| R  | L1390G-PS                   | AeroTech  | 75 x 531  | 3948.7  | 1973   | TRA | HPR |
| R  | L1395-P                     | Cesaroni  | 75 x 621  | 4895.4  | 2364.9 | CAR | HPR |
| R! | <a href="#">L1400SK</a> -P  | Animal    | 75 x 785  | 4744    | 2829.4 | NAR | HPR |
| R  | L1400F-P                    | Kosdon/AT | 54 x 728  | 2640    | 1248   | TRA | HPR |
| R! | L1400M-PS                   | AeroTech  | 75 x 653  | 4900.9  | 2648   | TRA | HPR |
| R  | L1400LW-PS                  | Loki      | 54 x 736  | 2850.6  | 1400   | TRA | HPR |
| R! | L1410SK-P                   | Cesaroni  | 75 x 757  | 4828.3  | 2875   | CAR | HPR |
| R  | L1420R-P                    | AeroTech  | 75 x 443  | 4603    | 2560   | TRA | HPR |
| H! | L1428SF-P                   | Contrail  | 76 x 1753 | 4733    | 3200cc | TRA | HPR |
| R  | L1482LB-PS                  | Loki      | 54 x 497  | 3882    | 1839   | TRA | HPR |
| R  | L1500T-P                    | AeroTech  | 98 x 665  | 5089.3  | 2490.9 | TRA | HPR |
| R  | L1520T-PS                   | AeroTech  | 75 x 518  | 3715.9  | 1854   | TRA | HPR |
| R  | L1685SS-P                   | Cesaroni  | 75 x 757  | 5069.3  | 3773.1 | CAR | HPR |
| R  | L1720WT-P                   | Cesaroni  | 75 x 486  | 3660    | 1755   | CAR | HPR |
| R  | L1940X-P                    | AeroTech  | 75 x 473  | 4329.2  | 1825   | TRA | HPR |
| R  | L2050LW-PS                  | Loki      | 54 x 1041 | 4802.43 | 2388   | TRA | HPR |

|      |                          |           |           |        |        |     |     |
|------|--------------------------|-----------|-----------|--------|--------|-----|-----|
| R    | L2200G-P                 | AeroTech  | 75 x 653  | 5104   | 2518   | TRA | HPR |
| R(a) | L2300G-P                 | Kosdon/AT | 54 x 727  | 2756   | 1310   | TRA | HPR |
| S    | <a href="#">L2350</a> -P | Estes     | 152 x 210 | 3886   | 1680   | NAR | HPR |
| R    | L2375WT-P                | Cesaroni  | 75 x 621  | 4864   | 2322   | CAR | HPR |
| R    | L2500ST-P                | AeroTech  | 98 x 444  | 4679   | 2160   | TRA | HPR |
| H    | L2525GF-P                | Contrail  | 75 x 1524 | 4681.4 | 3200cc | TRA | HPR |
| R    | L3150-P                  | Cesaroni  | 98 x 394  | 4807.8 | 2386   | CAR | HPR |
| R    | L3200-P                  | Cesaroni  | 75 x 486  | 3300.3 | 1555   | CAR | HPR |
| S    | L11000W-18A              | AeroTech  | 54 x 635  | 2684.4 | 2194   | TRA | HPR |

| Tip Tanımı | Üretici                  | Boyutları (mm) | İtici kuvvet (N-san) | İtici yakıt Ağırlığı (g) | Test Kurumu | Yarışma Onaylı |     |
|------------|--------------------------|----------------|----------------------|--------------------------|-------------|----------------|-----|
| R          | M520-P                   | Cesaroni       | 98 x 548             | 7278.5                   | 3713        | CAR            | HPR |
| R          | <a href="#">M650W</a> -P | AeroTech       | 75 x 801             | 5964                     | 3351        | NAR            | HPR |
| R          | M685W-PS                 | AeroTech       | 75 x 911             | 7560.8                   | 4320        | TRA            | HPR |
| H          | M700-P                   | WCH            | 75 x 1473            | 5592                     | 3951cc      | CAR            | HPR |
| H          | M711BS-P                 | Contrail       | 75 x 1371            | 5507                     | 3200cc      | TRA            | HPR |
| H          | M740(2800CC200M)-P       | Hypertek       | 75 x 1438            | 5143                     | 2800cc      | TRA            | HPR |
| R          | M745WC-PS                | Gorilla        | 75 x 785             | 5368                     | 2900        | TRA            | HPR |
| R          | <a href="#">M750W</a> -P | AeroTech       | 98 x 732             | 9325                     | 5300        | NAR            | HPR |
| R          | M795-P                   | Cesaroni       | 98 x 702             | 10133                    | 4892        | CAR            | HPR |
| R          | M840WH/LB-P              | Cesaroni       | 75 x 879.3           | 7521.2                   | 4249        | CAR            | HPR |
| R          | M900-P                   | Loki           | 76 x 785             | 5332.4                   | 3030        | TRA            | HPR |
| H          | M900-P                   | RATTworks      | 69 x 1828            | 6463.5                   | 3716cc      | TRA            | HPR |
| H          | M956(3500CCRGM)-P        | Hypertek       | 98 x 1166            | 6421                     | 3500cc      | TRA            | HPR |
| H          | M960FX(2800CC300MFX)-P   | Hypertek       | 75 x 1438            | 5126                     | 2800cc      | TRA            | HPR |
| H          | M1000(4630CCRGM)-P       | Hypertek       | 98 x 1405            | 9155                     | 4630cc      | TRA            | HPR |
| H          | M1001(5478CCRGM)-P       | Hypertek       | 98 x 1438            | 9835                     | 5478cc      | TRA            | HPR |
| H          | M1010FX(4630CCRGMFX)-P   | Hypertek       | 98 x 1405            | 9114                     | 4630cc      | TRA            | HPR |
| H          | M1015FX(3500CCRGMFX)-P   | Hypertek       | 98 x 1166            | 6334                     | 3500cc      | TRA            | HPR |
| R          | M1025WC-P                | Gorilla        | 98 x 870             | 9581                     | 5329        | TRA            | HPR |
| H          | M1040FX(4630CCRGMFX)-P   | Hypertek       | 98 x 1438            | 10098                    | 4638cc      | TRA            | HPR |
| R          | M1060-P                  | Cesaroni       | 98 x 548             | 7441                     | 3622        | CAR            | HPR |
| R!         | M1075DM-PS               | AeroTech       | 98 x 649             | 5571                     | 3846        | TRA            | HPR |
| R          | M1085WC-PS               | Gorilla        | 75 x 1039            | 6958                     | 3932        | TRA            | HPR |
| R          | M1101WH-P                | Cesaroni       | 75 x 621             | 5197.6                   | 2993        | CAR            | HPR |
| R          | M1160GR-P                | Cesaroni       | 75 x 757             | 5880.2                   | 3454        | CAR            | HPR |
| R!         | M1200SF-PS               | Loki           | 76 x 784             | 5122.6                   | 3130        | TRA            | HPR |
| R          | M1230IM-P                | Cesaroni       | 75 x 621             | 5506.5                   | 2900        | CAR            | HPR |
| R          | M1290WH-P                | Cesaroni       | 98 x 548             | 7649.3                   | 4295        | CAR            | HPR |
| R          | M1297W-P                 | AeroTech       | 75 x 665             | 5416.6                   | 2722        | TRA            | HPR |
| R          | M1300IM-P                | Cesaroni       | 75 x 757             | 6438.2                   | 3437        | CAR            | HPR |
| R!         | M1305M-PS                | AeroTech       | 98 x 649             | 6891                     | 4080        | TRA            | HPR |

|      |                             |           |            |          |        |     |     |
|------|-----------------------------|-----------|------------|----------|--------|-----|-----|
| R    | M1315W-P                    | AeroTech  | 75 x 801   | 6713.5   | 3499.4 | TRA | HPR |
| S    | M1340W-PS                   | AeroTech  | 98 x 556   | 7368.911 | 4036   | TRA | HPR |
| S    | M1350W-PS                   | AeroTech  | 75 x 622   | 5178.154 | 4808   | TRA | HPR |
| R    | <a href="#">M1350WW</a> -PS | Animal    | 75 x 785   | 5725     | 2927.3 | NAR | HPR |
| R    | M1355RT-PS                  | Gorilla   | 75 x 787   | 5164.65  | 5216   | TRA | HPR |
| R    | M1378LR-PS                  | Loki      | 54 x 1114  | 5363     | 2600   | TRA | HPR |
| R    | M1400-P                     | Cesaroni  | 75 x 757   | 6251     | 2992   | CAR | HPR |
| R    | M1401WH-P                   | Cesaroni  | 75 x 757   | 6268.3   | 3508   | CAR | HPR |
| R    | M1419W-P                    | AeroTech  | 98 x 579   | 7755.5   | 4077   | TRA | HPR |
| R    | M1450-P                     | Cesaroni  | 98 x 702   | 9955     | 4830   | CAR | HPR |
| R(a) | <a href="#">M1450W</a> -P   | Kosdon/AT | 75 x 1039  | 7813     | 4150   | NAR | HPR |
| R    | <a href="#">M1480RR</a> -PS | Animal    | 75 x 785   | 5800     | 3000   | NAR | HPR |
| H    | M1491BM-P                   | Contrail  | 76 x 1372  | 5675.6   | 3200cc | TRA | HPR |
| R    | M1500G-P                    | AeroTech  | 75 x 653   | 5220     | 2631   | TRA | HPR |
| R    | M1520BS-P                   | Cesaroni  | 98 x 548   | 7579     | 3602   | CAR | HPR |
| R    | M1540IM-P                   | Cesaroni  | 75 x 757   | 6819.4   | 3624.4 | CAR | HPR |
| R    | M1545GR-P                   | Cesaroni  | 75 x 1025  | 8186.7   | 4835   | CAR | HPR |
| R    | M1550R-P                    | AeroTech  | 75 x 801   | 5600     | 3170   | TRA | HPR |
| R    | M1560WT-P                   | Cesaroni  | 98 x 394   | 5342     | 2452   | CAR | HPR |
| R!   | M1565BL-P                   | Gorilla   | 98 x 870   | 7533     | 4992   | TRA | HPR |
| H    | M1575-P                     | Contrail  | 98 x 1524  | 6547     | 5300cc | TRA | HPR |
| R    | M1590CL-P                   | Cesaroni  | 75 x 893   | 7544.6   | 3590   | CAR | HPR |
| R    | M1600R-P                    | AeroTech  | 98 x 579   | 7084     | 4026   | TRA | HPR |
| R!   | M1610BL-PS                  | Gorilla   | 75 x 1039  | 5973.52  | 3654   | TRA | HPR |
| R    | M1630TT-P                   | Cesaroni  | 75 x 1039  | 8212.1   | 3948   | CAR | HPR |
| R    | M1650CT-PS                  | Loki      | 76 x 784   | 6535     | 3230   | TRA | HPR |
| R    | M1665WC-PS                  | Gorilla   | 75 x 787   | 5705.01  | 5579   | TRA | HPR |
| R    | M1670BS-P                   | Cesaroni  | 75 x 757   | 6041.7   | 2956.1 | CAR | HPR |
| R    | M1675PK-P                   | Cesaroni  | 75 x 757   | 6162     | 3019   | CAR | HPR |
| R!   | <a href="#">M1730SK</a> -P  | Animal    | 98 x 870   | 8115     | 4945.2 | NAR | HPR |
| R!   | M1770SK-P                   | Cesaroni  | 75 x 893   | 5933.4   | 3520   | CAR | HPR |
| R    | M1780NT-PS                  | AeroTech  | 75 x 653   | 5783     | 2560   | TRA | HPR |
| R!   | M1790SK-P                   | Cesaroni  | 98 x 702   | 8088.9   | 4706   | CAR | HPR |
| R    | M1800FJ-P                   | AeroTech  | 98 x 665   | 8200     | 9163   | TRA | HPR |
| R    | M1800BS-P                   | Cesaroni  | 98 x 702   | 9867.7   | 4802   | CAR | HPR |
| R    | M1810RL-P                   | Cesaroni  | 75 x 757   | 6132     | 3196   | CAR | HPR |
| R    | M1830CS-P                   | Cesaroni  | 75 x 621   | 5603.7   | 2542   | CAR | HPR |
| R    | M1845NT-PS                  | AeroTech  | 98 x 597.9 | 8307.79  | 3772   | TRA | HPR |
| R    | M1850W-P                    | AeroTech  | 75 x 924   | 7680     | 4009   | TRA | HPR |
| R    | M1850GG-P                   | Animal    | 75 x 781   | 5920     | 3375   | TRA | HPR |
| R    | M1882LW-PS                  | Loki      | 76 x 787   | 6303     | 3130   | TRA | HPR |
| R    | M1890-P                     | Cesaroni  | 98 x 702   | 9875.6   | 5280   | CAR | HPR |

|      |                             |                |                           |                                 |                                     |                        |                           |
|------|-----------------------------|----------------|---------------------------|---------------------------------|-------------------------------------|------------------------|---------------------------|
| R    | <a href="#">M1900BB</a> -P  | Animal         | 75 x 785                  | 6100                            | 2733                                | NAR                    | HPR                       |
| R    | M1939W-PS                   | AeroTech       | 98 x 732                  | 10482                           | 5719.1                              | TRA                    | HPR                       |
| R!   | M1969SF-PS                  | Loki           | 76 x 1038                 | 7295.78                         | 4266                                | TRA                    | HPR                       |
| R    | M2000R-P                    | AeroTech       | 98 x 732                  | 9218                            | 5368                                | TRA                    | HPR                       |
| R    | M2020IM-P                   | Cesaroni       | 75 x 893                  | 8429.4                          | 4349                                | CAR                    | HPR                       |
| R    | M2045BS-P                   | Cesaroni       | 75 x 893                  | 7388                            | 3547                                | CAR                    | HPR                       |
| R    | M2050X-P                    | AeroTech       | 75 x 700                  | 5493.35                         | 2268                                | TRA                    | HPR                       |
| R!   | M2050SK-P                   | Cesaroni       | 75 x 1039                 | 6744.6                          | 3870                                | CAR                    | HPR                       |
| R    | M2075SS-P                   | Cesaroni       | 75 x 893                  | 6286.6                          | 3982                                | CAR                    | HPR                       |
| R!   | M2080SK-P                   | Cesaroni       | 75 x 1025                 | 6827.3                          | 4107                                | CAR                    | HPR                       |
| R    | M2100G-P                    | AeroTech       | 98 x 598                  | 7802                            | 3948                                | TRA                    | HPR                       |
| R    | M2150RL-P                   | Cesaroni       | 75 x 893                  | 7455.4                          | 3835                                | CAR                    | HPR                       |
| R!   | <a href="#">M2200SK</a> -PS | Animal         | 75 x 1039                 | 6350                            | 3766                                | NAR                    | HPR                       |
| R    | M2245-P                     | Cesaroni       | 75 x 1025                 | 9976.7                          | 5074                                | CAR                    | HPR                       |
| R    | M2250CS-P                   | Cesaroni       | 75 x 621                  | 5472.2                          | 2489                                | CAR                    | HPR                       |
| H    | M2281BF-P                   | Contrail       | 75 x 1524                 | 5481                            | 5300cc                              | TRA                    | HPR                       |
| R    | M2400T-P                    | AeroTech       | 98 x 597                  | 7717                            | 3692.6                              | TRA                    | HPR                       |
| R    | M2500T-P                    | AeroTech       | 98 x 751                  | 9671                            | 4711.2                              | TRA                    | HPR                       |
| R    | <a href="#">M2500GG</a> -PS | Animal         | 75 x 1039                 | 7800                            | 4248                                | NAR                    | HPR                       |
| R    | M2505-P                     | Cesaroni       | 98 x 579                  | 7450                            | 3339                                | CAR                    | HPR                       |
| R    | M2550LB-PS                  | Loki           | 76 x 785                  | 6502                            | 3065                                | TRA                    | HPR                       |
| H    | M2700BS-P                   | Contrail       | 98 x 1524                 | 6034                            | 5300cc                              | TRA                    | HPR                       |
| H    | M2800BG-P                   | Contrail       | 98 x 1524                 | 6060                            | 5300cc                              | TRA                    | HPR                       |
| R(a) | <a href="#">M2900R</a> -P   | Kosdon/AT      | 75 x 1039                 | 5290                            | 3755                                | NAR                    | HPR                       |
| R    | M2925WC-PS                  | Gorilla        | 75 x 1039                 | 7897.8                          | 3820                                | TRA                    | HPR                       |
| R    | M3000ST-P                   | Animal         | 75 x 1039                 | 7367                            | 3819                                | TRA                    | HPR                       |
| R    | M3000LW-PS                  | Loki           | 76 x 1039                 | 8924.3                          | 4350                                | TRA                    | HPR                       |
| R    | M3100WT-P                   | Cesaroni       | 75 x 757                  | 6117.8                          | 2903                                | CAR                    | HPR                       |
| R    | M3400WT-P                   | Cesaroni       | 98 x 702                  | 9994.5                          | 4452                                | CAR                    | HPR                       |
| R    | M3464LB-PS                  | Loki           | 76 x 1038                 | 9395                            | 4464                                | TRA                    | HPR                       |
| R(a) | <a href="#">M3500R</a> -P   | Kosdon/AT      | 75 x 1039                 | 7310                            | 3755                                | NAR                    | HPR                       |
| R    | M3700WT-P                   | Cesaroni       | 75 x 803                  | 6800.3                          | 3019                                | CAR                    | HPR                       |
| R    | M4500ST-P                   | AeroTech       | 98 x 7680                 | 7277                            | 3425                                | TRA                    | HPR                       |
| R    | M4770-P                     | Cesaroni       | 98 x 548                  | 7312.4                          | 379                                 | CAR                    | HPR                       |
| R    | M6000ST-PS                  | AeroTech       | 98 x 1024                 | 9608                            | 4128                                | TRA                    | HPR                       |
| R    | M6400VM-P                   | Cesaroni       | 98 x 702                  | 8634.4                          | 4175                                | CAR                    | HPR                       |
|      | <b>Tip Tanımı</b>           | <b>Üretici</b> | <b>Boyutları<br/>(mm)</b> | <b>İtici kuvvet<br/>(N-san)</b> | <b>İtici yakıt<br/>Ağırlığı (g)</b> | <b>Test<br/>Kurumu</b> | <b>Yarışma<br/>Onaylı</b> |
| R    | <a href="#">N1000W</a> -P   | AeroTech       | 98 x 1046                 | 14126                           | 7925                                | NAR                    | HPR                       |
| R    | N1100-P                     | Cesaroni       | 98 x 1046                 | 14005                           | 6790                                | CAR                    | HPR                       |
| R    | N1560WH-P                   | Cesaroni       | 98 x 1239                 | 16803                           | 9946                                | CAR                    | HPR                       |
| R    | N1720WC-PS                  | Gorilla        | 98 x 1213                 | 14236.77                        | 7456                                | TRA                    | HPR                       |

|                   |                           |          |                 |                       |                             |                                 |                    |                       |
|-------------------|---------------------------|----------|-----------------|-----------------------|-----------------------------|---------------------------------|--------------------|-----------------------|
| R                 | N1800WH-P                 | Cesaroni | 98 x 702        | 10366.9               | 5727                        | CAR                             | HPR                |                       |
| R                 | N1975GR-P                 | Cesaroni | 98 x 1010       | 14271.6               | 8560                        | CAR                             | HPR                |                       |
| S                 | N1975W-PS                 | AeroTech | 98 x 1040       | 13893.1               | 7676                        | TRA                             | HPR                |                       |
| R                 | N2000W-P                  | AeroTech | 98 x 1046       | 13347.1               | 7752.6                      | TRA                             | HPR                |                       |
| R                 | <a href="#">N2020WW-P</a> | Animal   | 98 x 870        | 10281                 | 5160.9                      | NAR                             | HPR                |                       |
| R                 | N2200PK-P                 | Cesaroni | 98 x 1010       | 12066.4               | 6122                        | CAR                             | HPR                |                       |
| R!                | N2220DM-P                 | AeroTech | 98 x 1018       | 10657                 | 7183                        | TRA                             | HPR                |                       |
| R                 | N2500-P                   | Cesaroni | 98 x 1010       | 13633                 | 6778                        | CAR                             | HPR                |                       |
| R                 | N2501WH-P                 | Cesaroni | 98 x 1010       | 15227.2               | 8496                        | CAR                             | HPR                |                       |
| R                 | N2540GR-P                 | Cesaroni | 98 x 1239       | 17907                 | 10700                       | CAR                             | HPR                |                       |
| R                 | <a href="#">N2600GG-P</a> | Animal   | 98 x 870        | 10607                 | 5591.4                      | NAR                             | HPR                |                       |
| R!                | N2600SK-P                 | Cesaroni | 98 x 1010       | 11077.3               | 6618                        | CAR                             | HPR                |                       |
| R                 | <a href="#">N2700BB-P</a> | Animal   | 98 x 870        | 11452                 | 5147.1                      | NAR                             | HPR                |                       |
| R                 | N2712WC-PS                | Gorilla  | 98 x 870        | 10812.7               | 5286                        | TRA                             | HPR                |                       |
| R                 | <a href="#">N2800WW-P</a> | Animal   | 98 x 1213       | 14802                 | 7694.7                      | NAR                             | HPR                |                       |
| R                 | N2850BS-P                 | Cesaroni | 98 x 1010       | 13766.9               | 6759                        | CAR                             | HPR                |                       |
| R!                | N2876SK-PS                | Animal   | 98 x 122        | 11939.73              | 13675                       | TRA                             | HPR                |                       |
| R                 | N2900CL-P                 | Cesaroni | 98 x 1239       | 17613.7               | 8449                        | CAR                             | HPR                |                       |
| R                 | N3180-p                   | Cesaroni | 98 x 1010       | 14200.1               | 7460                        | CAR                             | HPR                |                       |
| R                 | N3300R-PS                 | AeroTech | 98 x<br>1059.46 | 14041.36              | 7512                        | TRA                             | HPR                |                       |
| R                 | N3301WH-P                 | Cesaroni | 98 x 1239       | 19317.6               | 10658                       | CAR                             | HPR                |                       |
| R!                | N3400SK-P                 | Cesaroni | 98 x 1239       | 14263.3               | 8282                        | CAR                             | HPR                |                       |
| R                 | N3800BS-P                 | Cesaroni | 98 x 1239       | 17631.7               | 8449                        | CAR                             | HPR                |                       |
| R                 | N3800LW-PS                | Loki     | 98 x 1016       | 12490.28              | 6125                        | TRA                             | HPR                |                       |
| R                 | <a href="#">N4000BB-P</a> | Animal   | 98 x 1213       | 16461                 | 7565.7                      | NAR                             | HPR                |                       |
| R                 | N4100RL-P                 | Cesaroni | 98 x 1239       | 17790.3               | 9101                        | CAR                             | HPR                |                       |
| R                 | N4800T-P                  | AeroTech | 98 x 1201       | 19361                 | 9570.8                      | TRA                             | HPR                |                       |
| R                 | N5600WT-P                 | Cesaroni | 98 x 1010       | 13628.2               | 6363                        | CAR                             | HPR                |                       |
| R                 | N5800CS-P                 | Cesaroni | 98 x 1239       | 20145.7               | 9021                        | CAR                             | HPR                |                       |
| R                 | N10000-P                  | Cesaroni | 98 x 1010       | 10347                 | 5200                        | CAR                             | HPR                |                       |
| <b>Tip Tanımı</b> |                           |          | <b>Üretici</b>  | <b>Boyutları (mm)</b> | <b>İtici kuvvet (N-san)</b> | <b>İtici yakıt Ağırlığı (g)</b> | <b>Test Kurumu</b> | <b>Yarışma Onaylı</b> |
| R                 | O2645BL-P                 | Gorilla  | 152 x 1206      | 24333                 | 15149                       | TRA                             | HPR                |                       |
| R                 | O3400IM-P                 | Cesaroni | 98 x 1239       | 21062.2               | 10930                       | CAR                             | HPR                |                       |
| R!                | O3700SK-P                 | Cesaroni | 161 x 957       | 29919.9               | 17157                       | CAR                             | HPR                |                       |
| R                 | O4900BS-P                 | Cesaroni | 161 x 957       | 37148.5               | 17700                       | CAR                             | HPR                |                       |
| R                 | O4925WC-P                 | Gorilla  | 152 x 1219      | 33005.07              | 16575                       | TRA                             | HPR                |                       |
| R                 | O5100-P                   | Cesaroni | 161 x 803       | 29990                 | 13245                       | CAR                             | HPR                |                       |
| S                 | O5280X-P                  | AeroTech | 98 x 1499       | 22223                 | 9779                        | TRA                             | HPR                |                       |
| R                 | O5800-P                   | Cesaroni | 161 x 754       | 30605.7               | 13950                       | CAR                             | HPR                |                       |
| H                 | O6300-P                   | Contrail | 156 x 1829      | 27244                 | 15000cc                     | TRA                             | HPR                |                       |
| R                 | O8000-P                   | Cesaroni | 161 x 957       | 40960                 | 18610                       | CAR                             | HPR                |                       |

|   |            |          |            |       |       |     |     |
|---|------------|----------|------------|-------|-------|-----|-----|
| S | O25000VM-P | Cesaroni | 132 x 1407 | 30795 | 14471 | CAR | HPR |
|---|------------|----------|------------|-------|-------|-----|-----|