



API Delevan[®] R e s o l v e r s Proven Technology. Proven Solutions.

API Delevan Resolvers are designed to meet stringent aerospace and defense requirements and API Delevan is ISO 9001:2015 and AS9100-D Certified. Founded in 1947, API Delevan has remained, since its inception, one of the most trusted global manufacturers of Resolvers.

Our Resolvers come in standard sizes or with custom modifications. Our resolvers are compact designs with no glass disks, or optics to fail. They provide high immunity to electrical noise, and mount directly to shafts and housings without the need for a coupling device. They're ideal for vertical integration with brushless motors, slip ring assemblies, and make great feedback sensors for servo systems. We offer three types of resolvers:



Frameless Brushless Resolvers generate speed and position data for aerospace & defense applications as well as commutating brushless servo motors. The frameless construction simplifies mounting mechanics because the rotor mounts directly onto the motor shaft and the stator housing mounts directly onto the motor end bell.

Housed Brushless Resolvers are the ideal partner for brushless servomotors using a rotary transformer to pass the reference signal to the rotor eliminating components that can limit life and cause noise.

Heavy Duty Resolvers provide a very tough package to withstand extreme abuse. Made of aluminum and steel with high integrity seals, they are capable of measuring rotary motion with the accuracy of a delicate encoder.

Our resolver engineering team is readily available for consultation to help you develop a resolver solution that fits your requirements.

API Delevan[®] Resolvers Brushless High-Performance Resolvers



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Heavy Duty Housed

1.1 inch Nominal Size Servo Mounting System High Shock Resistance Up to 125°C Operating Temperature Steel Housing



Heavy Duty Frameless

2.1 inch Nominal Size Flange / Servo Mounting System High Shock, Vibration, Radiation Resistance Up to 220°C+ Operating Temperature Steel or Aluminum Housing



R11

Heavy Duty Housed 1.1 inch Nominal Size Servo Mounting System High Shock Resistance Up to 125°C Operating Temperature Steel Housing



Heavy Duty Frameless 3.1 inch Nominal Size Flange / Servo Mounting System High Shock, Vibration, Radiation Resistance Up to 220°C+ Operating Temperature Steel Housing



Mil-Duty Housed

2.5 inch Nominal Size Flange / Servo Mounting System High Shock and Vibration Resistance Up to 125°C Operating Temperature Aluminum Housing



Heavy Duty Frameless

5.5 inch Nominal Size Flange / Servo Mounting System High Shock, Vibration, Radiation Resistance Up to 220°C+ Operating Temperature Steel Housing



Heavy Duty Frameless

1.0 inch Nominal Size Flange / Servo Mounting System High Shock, Vibration, Radiation Resistance Up to 220°C+ Operating Temperature Steel Housing



NewGen 15

Heavy Duty High Accuracy Frameless

1.5 inch Nominal Size Flange / Servo Mounting System High Shock and Vibration Resistance Up to 200°C Operating Temperature Aluminum Housing



Heavy Duty Frameless 1.5 inch Nominal Size Flange / Servo Mounting System

High Shock, Vibration, Radiation Resistance Up to 220°C+ Operating Temperature Steel or Aluminum Housing



NewGer 21

Heavy Duty High Accuracy Frameless

2.1 inch Nominal Size Flange / Servo Mounting System High Shock and Vibration Resistance Up to 200°C Operating Temperature Aluminum Housing

With their simple design and lack of on-board electronics, resolvers are incredibly rugged and more reliable than any other type of feedback device. That makes API Delevan Resolvers the natural choice for harsh environments involving extreme temperatures (-200 C to over 220°C+), high shock and vibration, elevated radiation levels, and contaminants such as dirt, grease, and oil. We guarantee they will reduce failure rates and extend the life of your applications.

API Delevan Resolvers provide a reliable high-performance solution for a range of demanding applications and difficult environments.



Aerospace and Defense Applications: missile and target acquisition systems, fin actuator control, jet engine fuel control, hydraulic system control, motor commutation and velocity feedback, high lift, spoiler and horizontal stabilizer, guidance and navigation, cockpit controls, control surface feedback, electro-optic and radar systems, nosewheel feedback, gun trunnions, forward-looking-infra-red (FLIR) systems

Downhole Oil & Gas Applications: well drilling, formation evaluation, well intervention, oil and gas production systems

Medical Applications: medical instrumentation and medical imaging including radiation environments.

Automation Applications: automotive assembly, paper mills, and textile applications

Our resolver engineering team is readily available for consultation to answer your questions and assist with your design needs. Additionally, a full complement of resolver drawings and 3D models are available to view or for download on our website.

Contact a resolver representative at **1.716.652.3600**, visit our website at **delevan.com**, or email: Resolver@delevan.com

