FEEDRkon Vibratory Feeder Controller

The FEEDRkon - Frequency Controlled Vibratory Feeder Controller regulates the output supplied to an electromagnetic feeder coil to achieve controlled vibration intensity and consistent material flow. It is suitable for applications where repeatable feeding, smooth start/stop behavior, protection of the feeder coil, and simple operator control are important.

FEEDRkon



Why choose this controller?

- **Faster Feeder Setup & Commissioning** – Reduce the time and effort involved in mechanical spring tuning through electronic frequency adjustment.
- **Quieter Feeder Operation** – Sinusoidal output current helps minimize electromagnetic and mechanical noise.
- **Consistent Feeding Performance** – Maintain steady material flow even with ±10% AC mains voltage fluctuations.
- **Flexible Feeder Control** – Independently adjust frequency and amplitude to suit different feeder designs and feeding requirements.
- **Easy Automation Integration** – Interface with PLCs and machine control systems using external control inputs and optional RS-485 communication.
- **Reliable Industrial Operation** – Built-in electrical protections, programmable start/stop functions, and convenient digital operation.

Typical applications

- **Vibratory Bowl Feeders** – Controlled feeding, orientation, and delivery of components in automated assembly systems.
- **Linear Vibratory Feeders** – Smooth and consistent movement of components along linear tracks and feeding channels.
- **Vibratory Hopper Feeders** – Controlled material discharge and replenishment of downstream feeding systems.
- **Parts Feeding & Assembly Systems** – Feeding of screws, fasteners, electronic components, and other small parts into automated machines.
- **Weighing, Dosing & Packaging Systems** – Adjustable feeding of compatible bulk materials, granules, and components for controlled material delivery.

Feature Highlights

- **Mains-Independent Frequency Control :** ·30–140 Hz programmable output frequency, independent of AC mains frequency, allows feeder tuning according to mechanical design and operating requirements.
- **Amplitude Control :** 0–100% adjustable output amplitude enables precise control of vibration intensity & feeding speed.
- **Consistent Feeding During Mains Voltage Fluctuations :** Maintains stable feeder output and consistent feed rate despite ±10% fluctuations in AC mains supply voltage.
- **Soft Start / Stop :** ·0–4 seconds adjustable ramp-up and ramp-down for controlled starting and stopping of feeder vibration.
- **Programmable On / Off Delay :** ·0–15 seconds adjustable delays support automated machine sequencing and process timing.
- **PLC & Remote Control Integration**
  - – 0–10 V DC external amplitude control for integration with PLCs and automation systems.
  - – Remote start/stop input for operation through external control signals.
  - – Optional RS-485 communication interface available on request.
- **Digital Operator Interface**
  - – Digital display and keypad for amplitude adjustment, frequency setting and parameter configuration.
  - – Displays operating status, amplitude setting, and output current.
  - – User and administrator parameter access levels.
- **Output Current Monitoring :** Real-time output current indication for monitoring feeder operation & assisting maintenance.
- **Electrical Protection & Fault Diagnostics :** Adjustable over current trip setting (0–6 A), Over voltage & short-circuit fault detection and Fault indications for easier troubleshooting & maintenance.

Designed for OEMs, machine builders, process equipment manufacturers, and industrial users who require reliable and repeatable control of electromagnetic vibratory feeders.

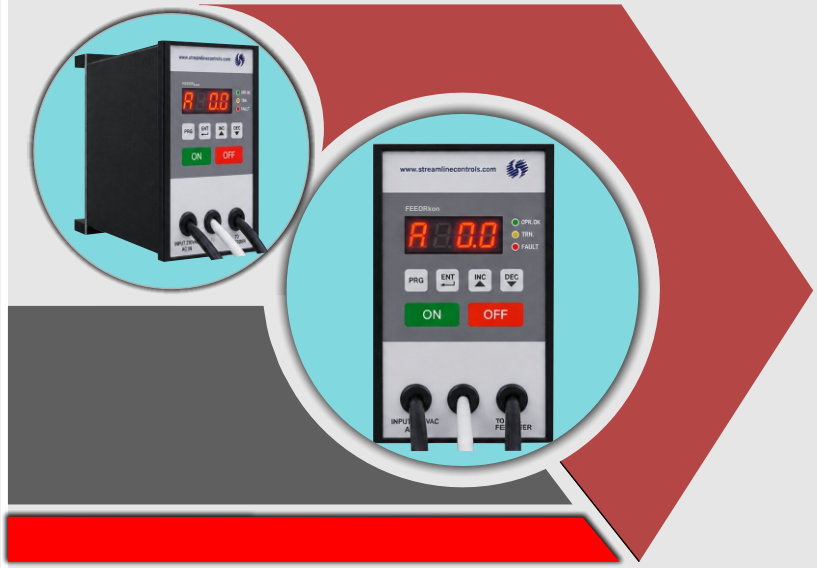
Automation... *Productivity through Technology...*

Automation Solutions for...

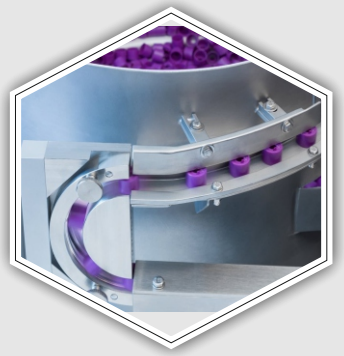
Vibratory Feeder Controller

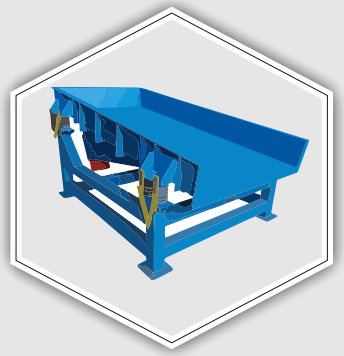
FEEDRkon

Streamline
Controls Private Limited
An ISO 9001-2015 Company
Since 1993...









Since 1993...

Streamline Controls Private Limited

305-306, Times Square-I, Nr. Baugban Circle, Thaltej, Ahmedabad-380059, Gujarat - INDIA.

Phone: 91 79 4005 4196 // Email: mktg@streamlinecontrols.com

Works: B-213/214, GIDC Electronics Estate, Sector-25, Gandhinagar-382044. Gujarat-INDIA

www.streamlinecontrols.com

* Thanks to Continuous Innovations, Specifications & Features are Subject to Change