

## Volumetric Screw Feeder Application

The Model 25-04 is a LOW CAPACITY screw feeder designed to volumetrically deliver dry chemicals into a process at a fixed rate.

## Theory of Operation

The Model 25-04 is supplied with a Repeat Cycle Percentage Timer Drive that allows the user to cycle the on-off time of a constant rate chemical discharge. The one (1) minute repeat cycle percentage timer is adjustable over a 3-100% range. Chemicals are discharged via a rotating auger that meters material from the internal storage hopper.



## Materials of Construction

- Carbon Steel Construction, 11 Gauge Base and Ends, 14 Gauge Hopper Section
- Universal Primer and Beige Epoxy Paint
- All Welds Continuous TIG

## Hopper

- 1.0 Ft<sup>3</sup> Volume

## Discharge

- 0.75", 1.5" or 2.0" Diameter Open Spiral Helix, 316 Stainless Steel, Progressive Pitch
- Cast Iron Spout

## Standard Drive Components

- 0.25 HP, 115/60/1 VAC TEFC Motor, Overload Relay and Heater
- Direct Coupled, Dual Range Gear Reducer

## Volumetric Discharge Range

- 0.03 to 8.5 Ft<sup>3</sup>/Hr (See Chart on Back Page)

## Standard Control Panel

- Repeat Cycle Percentage Timer
- 60 Seconds Cycle at 60 Hz, 72 Seconds at 50 Hz
- Timer Graduated 0-100 %
- 30:1 Range
- Feeder Mounted
- NEMA 4 Enclosure
- Start-Stop Switch

## Accuracy

- $\pm 1.0$  % by Volume,  $\pm 3.0$  % by Weight

## Standard Power Requirements

- 115/60/1 VAC, 15 Amps

## Weight

- 130 Lbs (59 Kg) without Control Panel

## Available Options

- 316 Stainless Steel Construction
- Electro-Mechanical Vibrator Agitation
- Diaphragm Flex Wall Paddle Agitation
- Bolted and Lift-Off Hopper Covers
- Hazardous Area Electrical Components
- Extension Hoppers
- Level Probes
- Non-Stick Coatings for Helix and Spout
- 115/50/1 VAC Repeat Cycle Percentage Timer
- 230/50/60/1 VAC Repeat Cycle Percentage Timer
- 230/460/50/60/3 VAC Motor
- 230/50/60/1 VAC Motor
- Standard Control Panel Including Vibrator Cycle Timer Control
- Standard Control Panel Including Vibrator Cycle Timer Control and Hand-Off-Auto Switch (Contact Closure Input for Remote Feeder Start or Stop)
- Remote Mounted Control Panel
- NEMA 4X Control Panel

## Feedrate Capacity

DRIVE CODE	RPM	0.75" (19 MM) DIA. HELIX	1.50" (38 MM) DIA. HELIX	2.0" (51 MM) DIA. HELIX
A	3.7	0.03 FT <sup>3</sup> /HR (0.0008 M <sup>3</sup> /HR)	0.19 FT <sup>3</sup> /HR (0.005 M <sup>3</sup> /HR)	0.37 FT <sup>3</sup> /HR (0.010 M <sup>3</sup> /HR)
B	5.2	0.05 FT <sup>3</sup> /HR (0.001 M <sup>3</sup> /HR)	0.27 FT <sup>3</sup> /HR (0.008 M <sup>3</sup> /HR)	0.53 FT <sup>3</sup> /HR (0.015 M <sup>3</sup> /HR)
C	10.5	0.11 FT <sup>3</sup> /HR (0.003 M <sup>3</sup> /HR)	0.53 FT <sup>3</sup> /HR (0.015 M <sup>3</sup> /HR)	1.06 FT <sup>3</sup> /HR (0.030 M <sup>3</sup> /HR)
D	21.0	0.22 FT <sup>3</sup> /HR (0.006 M <sup>3</sup> /HR)	1.06 FT <sup>3</sup> /HR (0.030 M <sup>3</sup> /HR)	2.12 FT <sup>3</sup> /HR (0.060 M <sup>3</sup> /HR)
E	31.5	0.33 FT <sup>3</sup> /HR (0.009 M <sup>3</sup> /HR)	1.59 FT <sup>3</sup> /HR (0.045 M <sup>3</sup> /HR)	3.18 FT <sup>3</sup> /HR (0.090 M <sup>3</sup> /HR)
F	42.0	0.45 FT <sup>3</sup> /HR (0.013 M <sup>3</sup> /HR)	2.12 FT <sup>3</sup> /HR (0.060 M <sup>3</sup> /HR)	4.25 FT <sup>3</sup> /HR (0.120 M <sup>3</sup> /HR)
G	84.0	0.90 FT <sup>3</sup> /HR (0.025 M <sup>3</sup> /HR)	4.25 FT <sup>3</sup> /HR (0.120 M <sup>3</sup> /HR)	8.50 FT <sup>3</sup> /HR (0.240 M <sup>3</sup> /HR)

