Volumetric Screw Feeder Application

The Model 25-06 is a LOW CAPACITY screw feeder designed to volumetrically deliver dry chemicals into a process at varying rates by changing the speed of the auger.

Theory of Operation

The Model 25-06 is supplied with a local control variable speed drive that allows the user to adjust the percentage of drive output from 0-100% of feedrate capacity. Chemicals are discharged via a rotating auger that meters material from the internal storage hopper. Control can be administered remotely via an analog signal isolator.

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^3 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 TEFC DC Motor, 90 V Armature, Permanent Magnet
- Direct Coupled, Dual Range Gear Reducer

Volumetric Discharge Range

- 0.03 to 8.5 Ft^3/Hr (See Chart on Back Page)

Standard Control Panel

- Merrick XTRA® Variable Speed DC Motor Controller, PWM Rated
- Start-Stop Switch
- Single Potentiometer, 0-100 % Speed Control
- 60:1 Speed Range
- Feeder Mounted
- NEMA 4X Enclosure

Accuracy

- ± 1.0 % by Volume, ± 3.0 % by Weight

Standard Power Requirements

- 115/60/1 VAC, 15 Amps

Weight

- 130 Lbs (59 Kg) without Control Panel

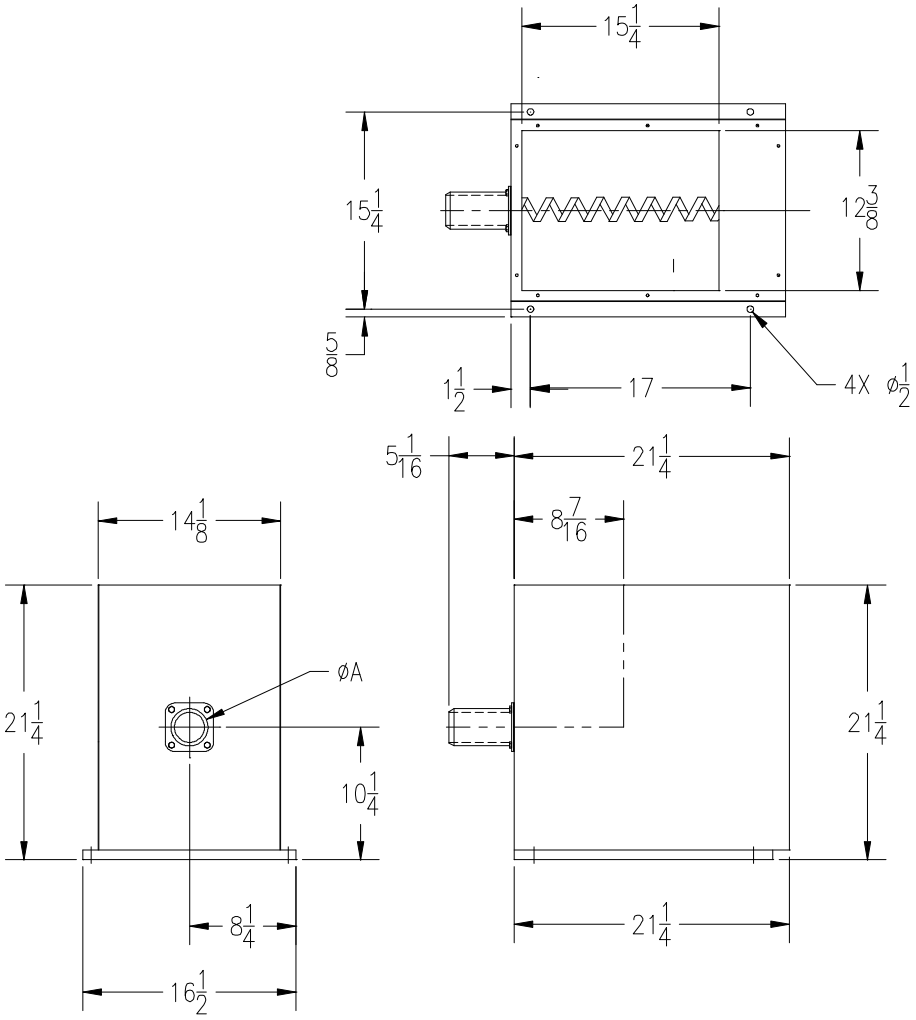
Available Options

- 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 Alarms
- Non-Stick Coatings for Helix and Spout
- 4-20 mA Signal Isolator with Hand-Off-Auto Switch for Remote Control
- Remote Mounted Control Panel
- 0-100% Potentiometer for Dosage
- Vibrator Cycle Timer with Hand-Off-Auto Switch
- Day/Night Timer with Separate Potentiometers for Day and Night Control
- 180 VDC or TENV DC Motor

Note:
When Vibrator Controls or Day/Night Timer are Required, Control Panel is NEMA 4X FRP.

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^3/HR (0.0008 M^3/HR)	0.19 FT^3 /HR (0.005 M^3/HR	0.37 FT^3/HR (0.010 M^3/HR)
B	5.2	0.05 FT^3/HR (0.001 M^3/HR)	0.27 FT^3/HR (0.008 M^3/HR)	0.53 FT^3/HR (0.015 M^3/HR)
C	10.5	0.11 FT^3/HR (0.003 M^3/HR)	0.53 FT^3/HR (0.015 M^3/HR)	1.06 FT^3/HR (0.030 M^3/HR)
D	21.0	0.22 FT^3/HR (0.006 M^3/HR)	1.06 FT^3/HR (0.030 M^3/HR)	2.12 FT^3/HR (0.060 M^3/HR)
E	31.5	0.33 FT^3/HR (0.009 M^3/HR)	1.59 FT^3/HR (0.045 M^3/HR)	3.18 FT^3/HR (0.090 M^3/HR)
F	42.0	0.45 FT^3/HR (0.013 M^3/HR)	2.12 FT^3/HR (0.060 M^3/HR)	4.25 FT^3/HR (0.120 M^3/HR)
G	84.0	0.90 FT^3/HR (0.025 M^3/HR)	4.25 FT^3/HR (0.120 M^3/HR)	8.50 FT^3/HR (0.240 M^3/HR)



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