

# FLEX-FLO™ FEED DELIVERY

## AUTOMATED PRODUCTION SYSTEMS



AP's Flex-Flo™ feed delivery system adapts to a variety of configurations and capacities to meet today's demanding production requirements.

# flexibility

## reliable delivery



### **DURABLE PVC TUBING** ▲

AP's polyvinyl chloride (PVC) tubing is extruded in our own facility, to exacting standards and under our own quality control. Blended PVC allows us to formulate the optimum compound for UV stabilization, strength, and wear resistance.



### **QUALITY AUGER** ▲

AP augers are coiled in-house from high tensile steel for consistent quality and strength. AP uses wire which is flattened prior to hardening which provides better resistance to distortion and an all around stronger product.



### **AROUND THE BEND** ▲

For moving feed up in the air and around corners, AP Flex-Flo™ elbows are specially formed with increased wall thickness on the inside of the elbow for added strength and wear resistance.



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**Model 220EP**  
(2.20"/55mm)

**Model 220**  
(2.20"/55mm)

**Model 300**  
(2.95"/75mm)

**Model HR**  
(3.5"/90mm)

**Model 350**  
(3.5"/90mm)

**Model 500**  
(5"/125mm)

### FLEX-FLO™ MODELS

Both tubing and augers are available in a variety of models to fit your specific requirements. Whether its ground feed, mash, high moisture corn, shelled corn or pellets, AP has the combinations to handle it.

**adaptability**  
**low maintenance**



**Single & Twin Out**



**Double Through Unloader**



**Single Unloader & 30° Boot**

### QUALITY UNLOADERS

Unloaders are available for Model 220, 300, 350, HR and 500 Flex-Flo™ or 4" and 6" rigid auger systems. Most unloaders are available in single or double outlet models, as well as "through" models for use in tandem tank systems.



### UNLOADER FEATURES

Unloaders feature heavy duty ball bearing anchor & bearing assemblies to increase service life and reduce maintenance. All unloaders have a slide gate above the auger to shut feed off and a side inspection door.



### PLASTIC BOOTS

AP offers straight drop, 30°, and double boot models. All are chemically blended with specially formulated ultraviolet inhibitors and impact modifiers to enhance durability. AP's clear boot model provides an easy visual of bin feed levels.



## SMARTIR SENSOR

SmartIR utilizes infrared technology to detect the level of feed and control all functions of the feed delivery system.

### SMARTIR FEATURES

- Digital Display with Push Button Operation
- On Delay Timer to delay the start of the auger and eliminate short cycling.
- Maximum Run Timer shuts down a running feed delivery system at a predetermined time preventing costly feed spills and excessive wear caused by empty feed bins or feed bridging.
- Alarm contact can be wired to an Agri-Alert alarm system or on site alarm to provide immediate notice that the Maximum Run Time has been exceeded.
- SmartIR comes with a 20 Amp., 230 Volt internal relay compatible on all flexible auger feed delivery systems.



Patent# 8056506

## SMARTFLEX

The SMARTflex control unit uses a proximity sensor and timers to efficiently operate a Flex-Flo delivery system. The SMARTflex comes with a digital display and push button programming for ease of operation.



### SMARTFLEX FEATURES

- Maximum Run Timer included
- An On Delay Timer prevents short cycling to the Flex-Flo motor
- Cumulative Run Timer monitors/tracks feed intake
- Alarm capable warning of system plugging or maximum run time exceeded



SMARTflex Control Unit



## HEAVY DUTY METAL BOOT

Multiple outlet requirements can be easily handled by our 22" (559mm) all metal boot. This boot, which can be fitted to any AP feed bin, will allow installation of up to four feed lines in several directions at once.



## MAXIMUM RUN TIMER

AP's Maximum Run Timer prevents costly feed spills and auger wear by shutting down the feed line if the system operates longer than the programmed run time. The Maximum Run Timer can be easily adapted to any flexible auger system.

## Your Source for Innovative Solutions.

### UNIVERSAL SENSOR

AP's Universal Sensor adapts to 24-240 volts and can operate either normally open or normally closed. Insensitive to temperature or humidity, this sensor features easy push button, 1 sec. to 3 hr. on delay programming to prevent short cycling of the feed system.



### CONTROL UNITS

AP offers both drop tube and hopper level switches as automatic shut-off options. Both units are located at the last feeder in the line. Drop tube switches and hopper level controls are also available with an optional proximity style switch with time delay.



### PRECISE CONTROL

AP offers both drop tube and hopper level switches as automatic shut-off options. Both units are located at the last feeder in the line. Drop tube switches and hopper level controls are also available with an optional proximity style switch with time delay.



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### POWER UNITS

The Flex-Flo™ auger is driven by a 1/3 to 1-1/2 hp, totally enclosed, fan cooled motor at a standard 358 RPM (other speeds available for special applications). Whether direct or belt driven, the drive system includes an easily accessible maintenance port, a safety back up switch and visible light warning of back ups in the feed line, and automatic thermal shut-off switch.



**Direct Drive Unit**



**Belt Drive Unit**

### EXTENSION UNITS

For applications requiring distances over the maximum auger length for that size auger, extension hoppers are available to extend the overall length of the Flex-Flo system. Extension hoppers can be installed at 90° from the original auger to make turns and extend Flex-Flo Augers without using elbows.



### DROP TUBE KITS

AP's original drop kit is available for all Flex-Flo Systems providing a totally enclosed outlet drop.



### FLEX-FLO™ SPECIFICATIONS

	Model 220	Model 300	Model 350	Model HR	Model 500
<b>*Feed Delivery Rate per Minute</b>	15 Lbs.(6.8 Kg)	50 Lbs.(22.7 Kg)	100 Lbs.(45.4 Kg)	50 Lbs.(22.7 Kg)	220 Lbs.(99.8 Kg)
<b>Std. Power Unit RPM</b>	358	358	358	358	358
<b>Outside Dia. of Tube</b>	2.2" (56 mm)	2.95" (75 mm)	3.5" (89 mm)	3.5" (89 mm)	5" (127 mm)
<b>Corner Radius</b>	5' (1.5 mtrs.) or 10' (3 mtrs.)	5' (1.5 mtrs.)	5' (1.5 mtrs.)	5' (1.5 mtrs.)	5' (1.5 mtrs.)
<b>Max. Length from BFT</b>	250' (76 mtrs)	200' (61 mtrs.)	150' (46 mtrs.)	150' (46 mtrs.)	***150' (46 mtrs.)
<b>**Max. Length Ext.</b>	300' (91 mtrs.)	240' (73 mtrs.)	180' (55 mtrs.)	180' (55 mtrs.)	180' (55 mtrs.)
<b>Recommended Motor HP at Max. Length</b>	1/2 HP	1 HP	1 HP	1 HP	1.5 HP
<b>Max. Moisture Rate</b>	18%	18%	18%	27%	27%
<b>Type of Feeds</b>	Ground, Mash & Small Particle	Ground, Mash & Small Particle	Ground, Mash, Shelled Corn & Pellets	Shelled Corn, Large Particles & Pellets	Shelled Corn, Large Particles & Pellets
<b>Max. Particle Size</b>	1/8"(D) x 1/2"(L)	1/8"(D) x 1/2"(L)	3/16"(D) x 1/2"(L)	3/8"(D) x 3/4"(L)	3/8"(D) x 1"(L)

\*Feed Delivery Rate calculated at standard 40 lbs. / cubic foot material (640 Kg per cubic meter)  
 \*\*Maximum length calculated with NO ELBOWS, subtract 15' from maximum length for each 45 degree elbow.  
 \*\*\*For High Moisture Corn, reduce system length by 50%.  
 NOTE: When more feed storage or multiple rations require tandem tanks, subtract 50' (15 mtrs.) from the Max. System Length.

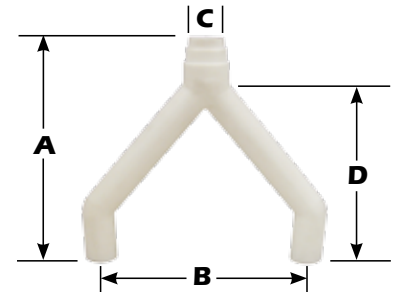
### Y-DROP DIMENSIONS

	"A"	"B"	"C"	"D"
<b>FLX-0502</b>	26" (66cm)	16.58" (42.11cm)	3.25" (8.26cm)*	20.62" (52.37cm)
<b>FLX-0503</b>	26" (66cm)	21.58" (54.81cm)	3.25" (8.26cm)*	20.79" (52.81cm)
<b>FLX-0603</b>	26" (66cm)	26.58" (67.51cm)	3.25" (8.26cm)*	20.79" (52.81cm)

\*Includes a stepped inlet that can be cut to fit a 3" (7.62cm) to 4.25" (10.8cm) outlet drop.

### KWIK-ATTACH DROP KIT

The Kwik-Attach drop kit is easy to install and attaches securely to avoid feed spills. This kit allows for complete clean out of feed and can be adapted with actuators for remote operation.



**Your Source for Innovative Solutions.**



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