

ACCUMETER™ OVATION

Loss-In-Weight Blender



Technical Specifications

The AccuMeter™ Ovation is a gravimetric loss in weight blender designed for continuous extrusion applications. The AccuMeter™ Ovation offers the most continuous homogeneous blend available versus common batch-type blenders or mixers. Available from 2 to 6 components and up to 5000 pounds per hour, the AccuMeter™ Ovation is perfect for many extrusion applications. Hoppers are mounted on precision load cells, eliminating the weight and vibration of the metering auger and motor assemblies.

The AccuMeter™ Ovation's lower mass flow weigh hopper learns the exact extruder rate and continuously sends the information to the control system. The upper material feed rates are automatically adjusted to match the learned extruder rate to maintain a consistent ingredient ratio.

Features

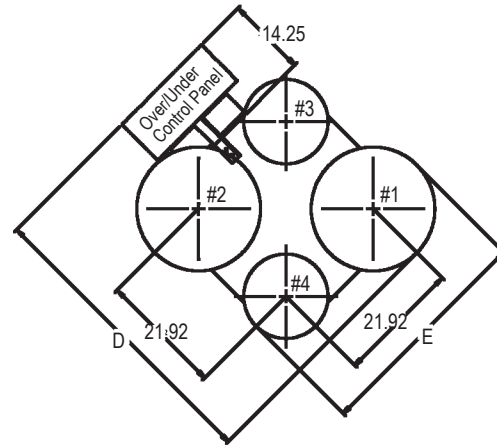
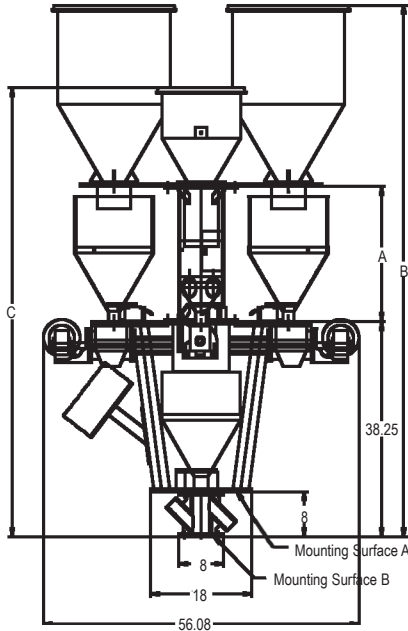
Standard Features

- Automatically adjusts individual feeders to match the extruder rate at the exact ratio required
- Upper material refill hoppers with refill valves
- Individual ingredient weigh hoppers, with clear side walls
- Lower mass flow weigh hopper assembly, with clear side walls
- Allen-Bradley Micro850 PLC with high resolution 7" color touchscreen
- Variable frequency drive (VFD) system with inverter duty AC motors; provides precision auger metering with greater recipe ranges and better accuracy
- Cascade mixing section
- Machine-mount cast aluminum throat mounting flange with drain tube
- Precision .02% span accurate cantilever load cells deliver the most accurate weighing system
- Recipe storage book for easy retrieval (up to 100 recipes)
- Full diagnostics
- Complete inventory and material usage information
- Alarm outputs
- 115/1/60 supply voltage
- Hopper lids specified for Sterling SSR Series receivers and loaders. (Cutout for non-Sterling loaders at no charge if drawings are provided.)
- Feeder linking allows redundant backup feeder for ingredients when metering the same material

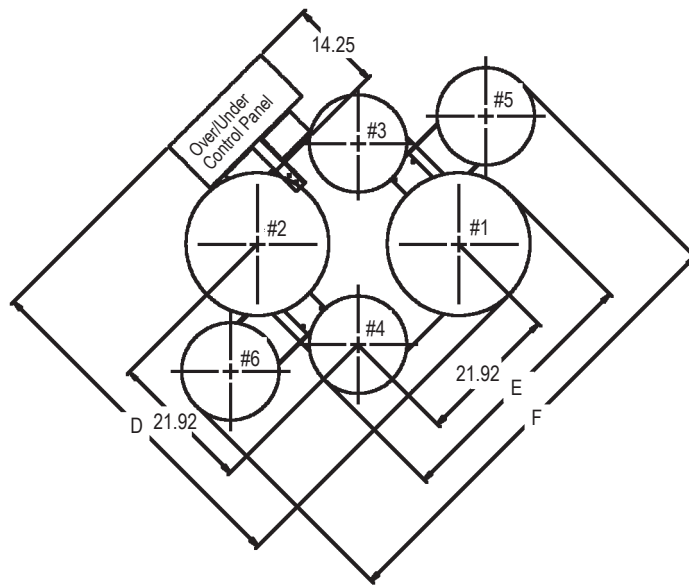
Optional Features

- Mezzanine mounting stand with 4" tube stub
- Low level solid state proximity sensor for each supply hopper including low level alarm panel with horn and silence button
- Spun regrind hopper with 3.5" dia. discharge, suitable for most free-flowing regrind materials
- Agitated regrind supply hopper and weigh hopper for regrind material
- Ethernet switch for remote communications
- Remote control panel

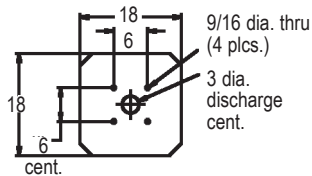
Dimensions



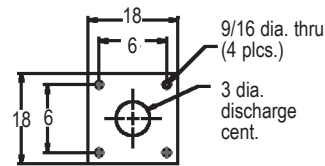
Typical 6-component blender



Mounting Surface A



Mounting Surface B



| Model | A in. (cm) | B in. (cm) | C in. (cm) | D in. (cm) | E in. (cm) |
|-------------|---------------|---------------|---------------|---------------|---------------|
| AMO 015 | 20 (51) | 81 (205) | 76 (195) | 51 (130) | 39 (100) |
| AMO 060/100 | 24 (61) | 95 (240) | 80 (205) | 54 (140) | 41 (105) |

Notes

AccuMeter™ Ovation floor-mount configuration also available; consult factory or sales representative for more information.

All orders must include the following information to be processed at the factory:

- Minimum and maximum customer specified extruder rates (processing rates) – real rates
- Minimum and maximum recipe percentage ranges for each ingredient, i.e. 50-100%
- Material types and bulk densities for each ingredient (material samples may be required)
- Hopper lid arrangement by ingredient, i.e. Sterling SSR Series.

Specifications

| Model | Max. Output, lbs./hr (kg/hr) | Number of Components |
|---------|------------------------------|----------------------|
| AMO 015 | 50 (340) | 2 - 6 |
| AMO 060 | 3000 (1360) | 2 - 6 |
| AMO 100 | 5000 (2270) | 2 - 6 |

Augers have minimum and maximum output rates based on auger and gearbox size. Rates and capacities are based on free-flowing virgin pellets with a bulk density of 35 lbs./cu. ft. Bulk density of materials, particularly regrinds, can greatly impact blender performance and rate. Actual rates will vary. Consult the factory for guaranteed blending rates.

All materials must be free-flowing and dry. Material samples are required for testing prior to shipment for guaranteed rates. Consult the Sterling Sales Department for shipping instructions and for the amounts of each material to send for testing. Typical amounts required are 100 lbs. for major ingredients and 25 lbs. for minor ingredients.

Output Charts

Cubic feet per hour (liters per hour)

| Auger Size in. (mm) | Gearbox Ratio | Min. Auger Speed | Min. Output cu. ft./hr (l/hr) | Max. Auger Speed | Max. Output, cu. ft./hr (l/hr) |
|---------------------|---------------|------------------|-------------------------------|------------------|--------------------------------|
| 3 (76.2) | 20:1 | 5 rpm | 4.00 (117) | 175 rpm | 104 (4,125) |
| | 10:1 | 10 rpm | 8.00 (235) | 350 rpm | 208 (8,255) |
| 2 (50.8) | 20:1 | 5 rpm | 1.14 (30) | 175 rpm | 34 (1,080) |
| | 10:1 | 10 rpm | 2.28 (61) | 350 rpm | 69 (2,160) |
| | 5:1 | 20 rpm | 4.57 (123) | 700 rpm | 138 (4,320) |
| 1 5/8 (41.2) | 20:1 | 5 rpm | 0.71 (20) | 175 rpm | 23 (710) |
| | 10:1 | 10 rpm | 1.43 (40) | 350 rpm | 47 (1,415) |
| | 5:1 | 20 rpm | 2.86 (80) | 700 rpm | 93 (2,850) |
| 1 (25.4) | 20:1 | 5 rpm | 0.17 (4) | 175 rpm | 5 (165) |
| | 10:1 | 10 rpm | 0.34 (9) | 350 rpm | 10 (335) |
| | 5:1 | 20 rpm | 0.68 (19) | 700 rpm | 21 (675) |
| 0.75 (19) | 20:1 | 5 rpm | 0.06 (2) | 175 rpm | 2 (75) |
| | 10:1 | 10 rpm | 0.14 (4) | 350 rpm | 5 (150) |
| | 5:1 | 20 rpm | 0.28 (8) | 700 rpm | 9 (300) |
| 0.5 (12.7) | 20:1 | 5 rpm | 0.014 (0) | 175 rpm | 0 (16) |
| | 10:1 | 10 rpm | 0.03 (0) | 350 rpm | 1 (33) |
| | 5:1 | 20 rpm | 0.06 (1) | 700 rpm | 2 (67) |

Pounds per hour (kilograms per hour)

| Auger Size in. (mm) | Gearbox Ratio | Min. Auger Speed | Min. Output lbs./hr (kg/hr) | Max. Auger Speed | Max. Output, lbs./hr (kg/hr) |
|---------------------|---------------|------------------|-----------------------------|------------------|------------------------------|
| 3 (76.2) | 20:1 | 5 rpm | 140 (63) | 175 rpm | 3,635 (1,650) |
| | 10:1 | 10 rpm | 280 (127) | 350 rpm | 7,270 (3,305) |
| 2 (50.8) | 20:1 | 5 rpm | 40 (18) | 175 rpm | 1,205 (545) |
| | 10:1 | 10 rpm | 80 (37) | 350 rpm | 2,410 (1,095) |
| | 5:1 | 20 rpm | 160 (74) | 700 rpm | 4,820 (2,190) |
| 1 5/8 (41.2) | 20:1 | 5 rpm | 25 (10) | 175 rpm | 815 (395) |
| | 10:1 | 10 rpm | 50 (22) | 350 rpm | 1,630 (740) |
| | 5:1 | 20 rpm | 100 (45) | 700 rpm | 3,265 (1,485) |
| 1 (25.4) | 20:1 | 5 rpm | 6 (3) | 175 rpm | 180 (80) |
| | 10:1 | 10 rpm | 12 (5) | 350 rpm | 360 (165) |
| | 5:1 | 20 rpm | 24 (11) | 700 rpm | 720 (325) |
| 0.75 (19) | 20:1 | 5 rpm | 2 (1) | 175 rpm | 80 (35) |
| | 10:1 | 10 rpm | 5 (2) | 350 rpm | 160 (70) |
| | 5:1 | 20 rpm | 10 (4) | 700 rpm | 320 (145) |
| 0.5 (12.7) | 20:1 | 5 rpm | 0.5 (0.2) | 175 rpm | 20 (9) |
| | 10:1 | 10 rpm | 1 (0.4) | 350 rpm | 40 (15) |
| | 5:1 | 20 rpm | 2 (0.9) | 700 rpm | 80 (35) |

NOTE: These tables represent approximate output values for variable frequency AC inverter drives. These results may not be achieved, given a particular application or material. Consult the factory for guaranteed rates.