



# Tri-Blender<sup>®</sup>

## Product Data / Specifications

### Construction Materials & Order Information

#### Standard Design

The Tri-Blender Series consists of a standard NEMA C-flange motor, 316L grade stainless steel blending chamber, a balanced mechanical seal, a powder inlet assembly, liquid inlet assembly, 304 stainless steel hopper, and a 304 stainless steel base.

#### Seal Types

##### Single Stage Models

###### Type D (standard)

Description: sanitary external balanced seal

Seal Face Material: ■ Stainless steel vs. Carbon (rotating)

###### Type DG (option)

Description: clamped-in seal/seat design

Seal Face Material: ■ SiC clamped-in seat vs. Carbon (rotating)

■ Tungsten carbide vs. Carbon (rotating)

■ Ceramic vs. Carbon (rotating)

###### Type E (option)

Description: water-cooled balanced double seal

Seal Face Material: ■ Stainless steel vs. Carbon (rotating)

##### Dual Stage Models

###### Type DG (standard)

Description: clamped-in seal/seat design

Seal Face Material: ■ Stainless steel clamped-in seat vs. Carbon (rotating)

■ SiC vs. Carbon (rotating)

■ Tungsten carbide clamped-in seat vs. Carbon (rotating)

# Tri-Blender®

## Materials of Construction

### Model F2116MD

<b>Dry Ingredient Capacity:</b>	Up to 50 lbs. (23 kg) per minute*
<b>Installation Size:</b>	18 x 18 in. (46 x 46 cm) floor space requirement
<b>Height:</b>	40° hopper, 52 <sup>7</sup> / <sub>8</sub> in. (134 cm) 60° hopper, 52 <sup>15</sup> / <sub>16</sub> in. (134 cm)
<b>Controls:</b>	Manually actuated butterfly valve. Optional electrically actuated valve with control panel or pneumatic valve available.
<b>Construction:</b>	All wetted parts are 316 stainless steel with quick-couple Tri-Clamp® connections.
<b>Base:</b>	Stainless steel
<b>Motor:</b>	3 HP - 3500 RPM (2.2 kW) TEFC 3 phase 230/460 volt. Dual frequency and voltage rated 60 Hz at 230/460 volts, to 50 Hz at 380 volts. Optional explosion-proof motor available.
<b>Hopper:</b>	304 stainless steel – 40° or 60° angle available
<b>Powder Inlet:</b>	2 in. (50.8mm) connection
<b>Liquid Inlet:</b>	1½ in. (38.1mm) connection
<b>Liquid Outlet:</b>	1½ in. (38.1mm) connection
<b>Pump Requirements:</b>	
<i>Systems handling viscosity up to 500cps</i>	
Supply Pump:	C114MD56T-S Tri-Flo® Centrifugal Pump
Impeller:	3¼" (82.6mm) Dia.
Casing:	1½" (38.1mm) inlet, 1½" (38.1mm) outlet
Motor:	¾ HP - 1750 RPM
Discharge Pump:	A discharge pump may be required on some applications, consult Tri-Clover for recommendations
<i>Systems handling viscosity over 500cps</i>	
Supply Pump:	TSR4NLS20MDU0C(X)-AO Positive Pump
Base:	Standard
Drive:	Gearhead Motor 3 HP 3PH 60Hz 230/460V, Model SK22-182TC, 317 RPM
Discharge Pump:	TSR4NLS20MDU0C(X)-AO Positive Pump
Base:	Standard
Drive:	Gearhead Motor 3 HP 3PH 60Hz 230/460V, Model SK22-182TC, 332 RPM

\*Absorption dependent on characteristics of product.

# Tri-Blender®

Model F3218MD

<b>Dry Ingredient Capacity:</b>	Up to 100 lbs. (45 kg) per minute*
<b>Installation Size:</b>	20 x 30 in. (51 x 76 cm) floor space requirement
<b>Height:</b>	40° hopper, 61 <sup>11</sup> / <sub>16</sub> in. (157 cm) 60° hopper, 54 <sup>3</sup> / <sub>4</sub> in. (139 cm)
<b>Controls:</b>	Manually actuated butterfly valve. Optional electrically actuated valve with control panel or pneumatic valve available.
<b>Construction:</b>	All wetted parts are 316 stainless steel with quick-couple Tri-Clamp® connections.
<b>Base:</b>	Stainless steel
<b>Motor:</b>	15 HP - 1750 RPM (11 kW) TEFC 3 phase 230/460 volt. Dual frequency and voltage rated 60 Hz at 230/460 volts, to 50 Hz at 380 volts. Optional explosion-proof motor available.
<b>Hopper:</b>	304 stainless steel, 60° angle Optional 40° hopper available for bridging type ingredients.
<b>Powder Inlet:</b>	3 in. (76.2mm) connection
<b>Liquid Inlet:</b>	1½ in. (38.1mm) connection
<b>Liquid Outlet:</b>	2 in. (50.8mm) connection
<b>Pump Requirements:</b>	
<i>Systems handling viscosity up to 500cps</i>	
Supply Pump:	C218MD18T-S Tri-Flo® Centrifugal Pump
Impeller:	6" (152.4mm) Dia.
Seal:	Type D - External Balanced
Casing:	3" (76.2mm) inlet, 1½" (38.1mm) outlet- Tri-Clamp
Motor:	3 HP - 1750 RPM, 3-60-230/460 Volt TEFC - Easy Clean
Discharge Pump:	A discharge pump may be required on some applications, consult Tri-Clover for recommendations
<i>Systems handling viscosity over 500cps</i>	
Supply Pump:	TSR4WLS25MDU0C(X)-AO Positive Pump
Base:	Standard
Drive:	Gearhead Motor 3 HP 3PH 60Hz 236/460V, Model SK12-182TC, 263 RPM
Discharge Pump:	TSR4WLS25MDU0C(X)-AO Positive Pump
Base:	Standard
Drive:	Gearhead Motor 3 HP 3PH 60Hz 236/460V, Model SK12-182TC, 297 RPM



\*Absorption dependent on characteristics of product.

# Tri-Blender®

**Model F4329MD**

**Dry Ingredient Capacity:**

Up to 350 lbs. (159 kg)  
per minute\*

**Installation Size:**

20 x 30 in. (51 x 76 cm)  
floor space requirement

**Height:**

40° hopper, 61¾ in. (157 cm)  
60° hopper, 55<sup>5</sup>/<sub>16</sub> in. (140 cm)



**Controls:**

Manually actuated butterfly valve.  
Optional electrically actuated valve with  
control panel or pneumatic valve available.

**Construction:**

All wetted parts are 316 stainless steel with quick-couple  
Tri-Clamp® connections.

**Base:**

Stainless steel

**Motor:**

20 HP - 1750 RPM (15 kW) TEFC 3 phase 230/460 volt.  
Dual frequency and voltage rated 60 Hz at 230/460 volts,  
to 50 Hz at 380 volts.  
Optional explosion-proof motor available.

**Hopper:**

304 stainless steel – 40° or 60° angle available. NOTE: the  
F4329MD Tri-Blender is commonly used with a suspended  
bulk storage hopper. Other options are available.

**Powder Inlet:**

4 in. (101.6mm) connection

**Liquid Inlet:**

2 in. (50.8mm) connection

**Liquid Outlet:**

3 in. (76.2mm) connection

**Pump Requirements:**

*Systems handling viscosity up to 500cps*

Supply Pump: C328MD18T-S Tri-Flo® Centrifugal Pump

Impeller: 5¾" (146.0mm) Dia.

Seal: Type D - External Balanced

Casing: 3" (76.2mm) inlet, 2" (50.8mm) outlet- Tri-Clamp

Motor: 5 HP - 1750 RPM, 3-60-230/460 Volt TEFC - Easy Clean

Discharge Pump: A discharge pump may be required on some applications,  
consult Tri-Clover for recommendations

*Systems handling viscosity over 500cps*

Supply Pump: TSR5NLS30MDU0C(X)-AO Positive Pump

Base: Standard

Drive: Gearhead Motor 3 HP 3PH 60Hz 230/460V,  
Model SK22-184TC, 227 RPM

\*Absorption dependent on characteristics of product.


# Tri-Blender®

Discharge Pump:	TSR5NLS30MDU0C(X)-AO Positive Pump
Base:	Standard
Drive:	Gearhead Motor 3 HP 3PH 60Hz 230/460V, Model SK22-184TC, 251 RPM
<b>Model F2116 EZ-System</b>	
<b>Dry Ingredient Capacity:</b>	Up to 50 lbs. (23 kg) per minute
<b>Installation Size:</b>	33 x 28 in. (54 x 71 cm) floor space requirement
<b>Height:</b>	40° hopper, 64 <sup>3</sup> / <sub>4</sub> in. (162 cm) 60° hopper, 57 <sup>7</sup> / <sub>8</sub> in. (147 cm)
<b>Construction:</b>	All wetted parts are 316 stainless steel with quick-couple Tri-Clamp® connections.
<b>Controls:</b>	Manually actuated butterfly valve. Optional electrically actuated valve with control panel or pneumatic valve available.
<b>Base:</b>	Stainless steel
<b>Motor:</b>	3 HP - 3500 RPM (2.2 kW) TEFC 3 phase 230/460 volt. Optional explosion-proof motor available.
<b>Hopper:</b>	304 stainless steel – 60° angle or 40° angle for bridging- type ingredients
<b>Supply Pump:</b>	Required - model dependent on application
<b>Discharge Pump:</b>	Dependent on application
<b>Powder Inlet:</b>	2 in. (50.8mm) connection
<b>Liquid Inlet:</b>	1½ in. (38.1mm) Tube OD Tri-Clamp connections
<b>Liquid Outlet:</b>	2 in. (50.8mm) Tube OD Tri-Clamp connections



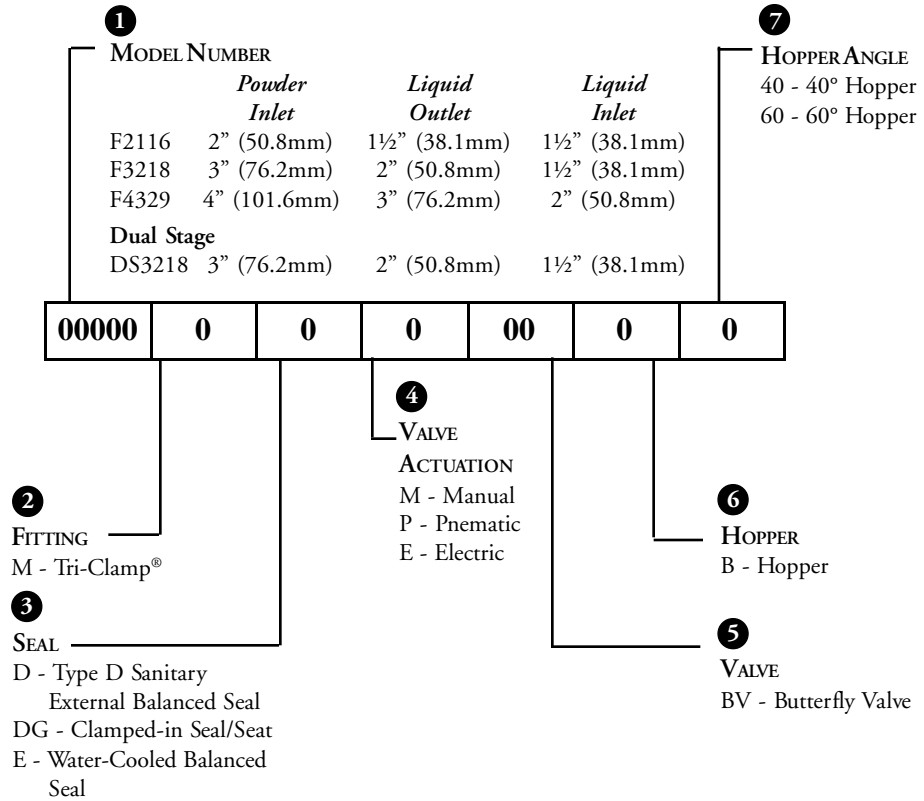
# Tri-Blender®

## Model DS3218 Dual-Stage

<b>Dry Ingredient Capacity:</b>	Up to 100 lbs. (45 kg) per minute (Absorption dependent on product characteristics).	
<b>Installation Size:</b>	20 x 30 in. (51 x 76 cm) floor space requirement	
<b>Height:</b>	40° hopper, 64 <sup>3</sup> / <sub>4</sub> in. (162 cm) 60° hopper, 57 <sup>7</sup> / <sub>8</sub> in. (147 cm)	
<b>Controls:</b>	Manually actuated butterfly valve. Optional electrically actuated valve with control panel or pneumatic valve available.	
<b>Construction:</b>	All wetted parts are 316 stainless steel with quick-couple Tri-Clamp connections	
<b>Base:</b>	Stainless steel	
<b>Motor:</b>	30 HP (22 kW) - 1750 RPM-TEFC 3 phase 230/460 volt. Optional 30 HP 3 phase 50 Hz 380V TEFC motor.	
<b>Hopper:</b>	Type 304 stainless steel - 60° or 40° angle for bridging-type ingredients	
<b>Powder Inlet:</b>	3 in. (76.2mm) Tube OD Tri-Clamp connections	
<b>Liquid Inlet:</b>	1½ in. (38.1mm) Tube OD Tri-Clamp connections	
<b>Liquid Outlet:</b>	2 in. (50.8mm) Tube OD Tri-Clamp connections	
<b>Pump Requirements:</b>		
<i>Systems handling viscosity up to 500cps</i>		
Supply Pump:	C218MD18T-S Tri-Flo® Centrifugal Pump	
Impeller:	6" (152.4mm) Dia.	
Seal:	Type D - External Balanced	
Casing:	3" (76.2mm) inlet, 1½" (38.1mm) outlet - Tri-Clamp	
Motor:	3 HP - 1750 RPM, 3-60-230/460 Volt TEFC - Easy Clean	
Discharge Pump:	A discharge pump may be required on some applications, consult Tri-Clover for recommendations	
<i>Systems handling viscosity over 500cps</i>		
Supply Pump:	TSR4WLS25MDU0C(X)-AO Positive Pump	
Base:	Standard	
Drive:	Gearhead Motor 3 HP 3PH 60Hz 236/460V, Model SK12-182TC, 263 RPM	
Discharge Pump:	TSR4WLS25MDU0C(X)-AO Positive Pump	
Base:	Standard	
Drive:	Gearhead Motor 3 HP 3PH 60Hz 236/460V, Model SK12-182TC, 297 RPM	

# Tri-Blender®

## Order Information



**MODEL NUMBER EXAMPLE**

1
2
3
4
5
6
7

**F2116MD - MBV - B60**



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