
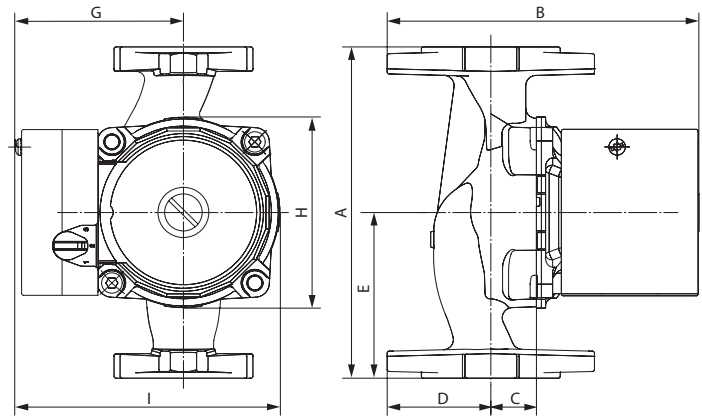
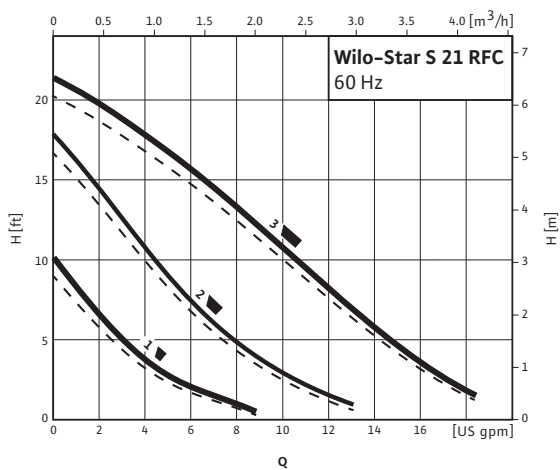


# Submittal Data Sheet



## Wilo Star – Residential Wet Rotor Circulators

Star S 21 RFC							
		Project:					
		Engineer:					
		Contractor:					
		Submitted By:			Date:		
		Approved By:			Date:		
Tag #	Model #	Check Valve	Speed	Flow	Head	Phase	Voltage
	Star S 21 RFC					1	115v



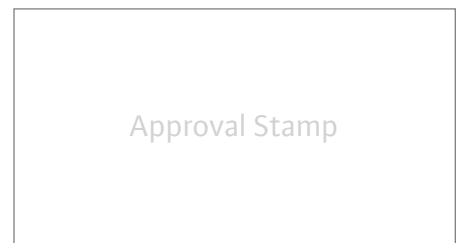
Applications	
• Heating Systems	• Air-Conditioning
• Cooling Systems	• Water/Glycol up to 50%
• Solar Systems	• Geothermal Systems

Materials of Construction	
Impeller	Engineered Composite (40% GF)
Shaft	Stainless Steel (X40 Cr13) AISI 420SS
Bearing	Metal Impregnated Carbon
Volute	Cast Iron
Pump Housing	Cast Iron with Installable Check Valve
Check Valve	Glass filled Noryl + EPDM rubber

Technical Data	
Max. Temp. Range	-14°F to 230°F (-10°C to 110°C)
Ambient Temp.	104°F (40°C)
Electrical Connections	1-115
Max. Working Pressure	140 PSI (10 Bar)
Min. Inlet Pressure 122°F (50°C)	0.7 PSI (0.05 Bar)
Min. Inlet Pressure (203°F)	4.4 PSI (0.3 Bar)
Min. Inlet Pressure (230°F)	14.5 PSI (1 Bar)

Dimensions and Weights									
Model	Dimensions - Inches (mm)								Weight lbs (kg)
	A	B	C	D	E	G	H	I	
Star S 21 RFC	6 <sup>3</sup> / <sub>8</sub>	6 <sup>3</sup> / <sub>8</sub>	7 <sup>7</sup> / <sub>8</sub>	2	3 <sup>3</sup> / <sub>16</sub>	3 <sup>3</sup> / <sub>16</sub>	3 <sup>11</sup> / <sub>16</sub>	5 <sup>1</sup> / <sub>16</sub>	6.5
	(162)	(154)	(22)	(50)	(81)	(81)	(93.5)	(128)	(3.0)


Motor Data				
Model	Horsepower	Speed	Watts	FLA
	hp	RPM	W	A
Star S 21 RFC	1/25	1300-2700	56-110	0.52-0.92

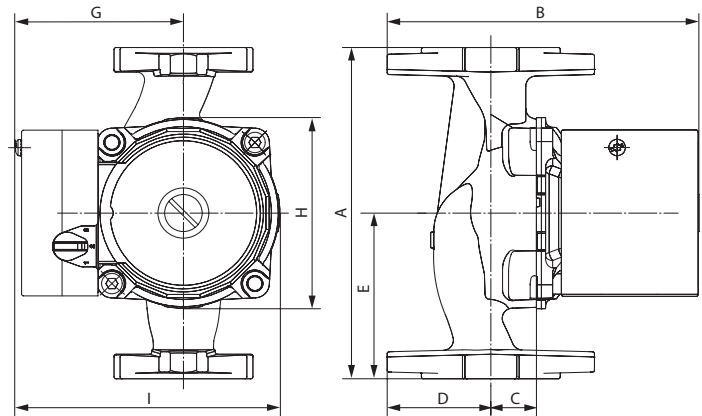
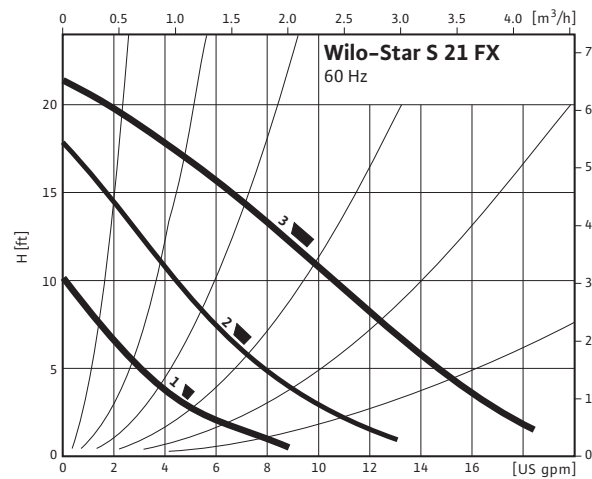


# Submittal Data Sheet

## Wilco Star – Residential Wet Rotor Circulators



Star S 21 FX							
		Project:					
		Engineer:					
		Contractor:					
		Submitted By:			Date:		
		Approved By:			Date:		
Tag #	Model #	Check Valve	Speed	Flow	Head	Phase	Voltage
	Star S 21 FX	n/a				1	115v



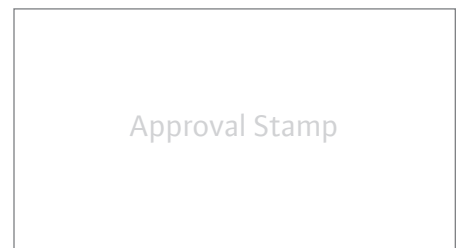
Applications	
• Heating Systems	• Air-Conditioning
• Cooling Systems	• Water/Glycol up to 50%
• Solar Systems	• Geothermal Systems

Materials of Construction	
Impeller	Engineered Composite (40% GF)
Shaft	Stainless Steel (X40 Cr13) AISI 420SS
Bearing	Metal Impregnated Carbon
Volute	Cast Iron
Pump Housing	Cast Iron

Technical Data	
Max. Temp. Range	-14°F to 230°F (-10°C to 110°C)
Ambient Temp.	104°F (40°C)
Electrical Connections	1-115
Max. Working Pressure	140 PSI (10 Bar)
Min. Inlet Pressure 122°F (50°C)	0.7 PSI (0.05 Bar)
Min. Inlet Pressure (203°F)	4.4 PSI (0.3 Bar)
Min. Inlet Pressure (230°F)	14.5 PSI (1 Bar)

Model	Dimensions - Inches (mm)								Weight lbs (kg)
	A	B	C	D	E	G	H	I	
Star S 21FX	6 <sup>3</sup> / <sub>8</sub>	6 <sup>3</sup> / <sub>8</sub>	7 <sup>7</sup> / <sub>8</sub>	2	3 <sup>3</sup> / <sub>16</sub>	3 <sup>3</sup> / <sub>16</sub>	3 <sup>11</sup> / <sub>16</sub>	5 <sup>1</sup> / <sub>16</sub>	6.5
	(162)	(154)	(22)	(50)	(81)	(81)	(93.5)	(128)	(3.0)

Motor Data				
Model	Horsepower hp	Speed RPM	Watts W	FLA A
Star S 21FX	1/25	1300-2700	56-110	0.52-0.92



WILO USA LLC  
Tel: (262) 204-6600 Web: www.wilo-usa.com  
Fax: (888) 945-6873 Email: info.us@wilo.com

WILO Canada Inc.  
Tel: (403) 276-9456  
Fax: (403) 277-9456 Email: info@wilo-canada.com

WILO Mexico  
Tel: +52 55 5586 3209 Web: www.wilo-mexico.com.mx  
Fax: +52 1 55 5413 4165 Email: info@wilo.com.mx

# Submittal Data Sheet

## Wilco Star – Residential Wet Rotor Circulators

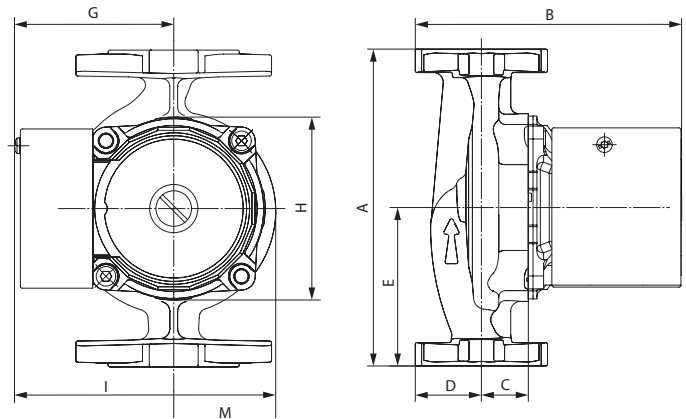
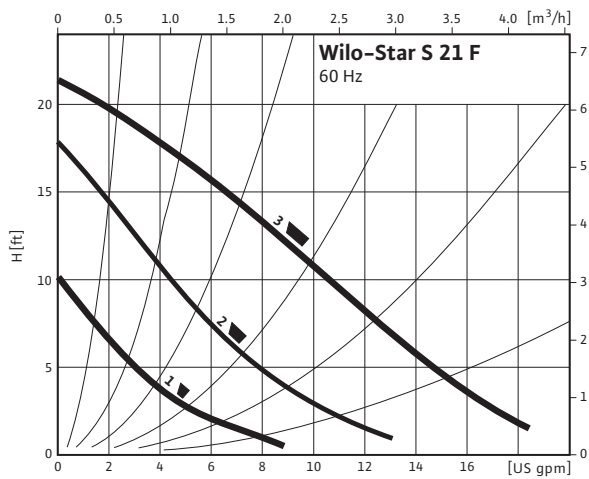


### Star S 21 F



Project:			
Engineer:			
Contractor:			
Submitted By:		Date:	
Approved By:		Date:	

Tag #	Model #	Check Valve	Speed	Flow	Head	Phase	Voltage
	Star S 21 F	n/a				1	115v



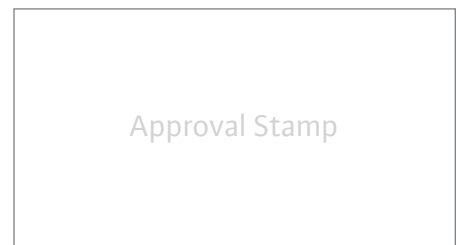
Applications	
• Heating Systems	• Air-Conditioning
• Cooling Systems	• Water/Glycol up to 50%
• Solar Systems	• Geothermal Systems

Materials of Construction	
Impeller	Engineered Composite (40% GF)
Shaft	Stainless Steel (X40 Cr13) AISI 420SS
Bearing	Metal Impregnated Carbon
Volute	Cast Iron
Pump Housing	Cast Iron

Technical Data	
Max. Temp. Range	-14°F to 230°F (-10°C to 110°C)
Ambient Temp.	104°F (40°C)
Electrical Connections	1-115
Max. Working Pressure	140 PSI (10 Bar)
Min. Inlet Pressure 122°F (50°C)	0.7 PSI (0.05 Bar)
Min. Inlet Pressure (203°F)	4.4 PSI (0.3 Bar)
Min. Inlet Pressure (230°F)	14.5 PSI (1 Bar)

Dimensions and Weights										
Model	Dimensions – Inches (mm)									Weight lbs (kg)
	A	B	C	D	E	G	H	I	M	
Star 30 F	6 <sup>3</sup> / <sub>8</sub>	6 <sup>3</sup> / <sub>8</sub>	7 <sup>8</sup> / <sub>8</sub>	1 <sup>5</sup> / <sub>16</sub>	3 <sup>3</sup> / <sub>16</sub>	3 <sup>3</sup> / <sub>16</sub>	3 <sup>11</sup> / <sub>16</sub>	5 <sup>1</sup> / <sub>16</sub>	3 <sup>15</sup> / <sub>16</sub>	6.5
	(162)	(154)	(22)	(34)	(81)	(81)	(93.5)	(128)	(100)	(3.0)


Motor Data				
Model	Horsepower	Speed	Watts	FLA
	hp	RPM	W	A
Star S 21 F	1/25	1300-2700	56-110	0.52-0.92

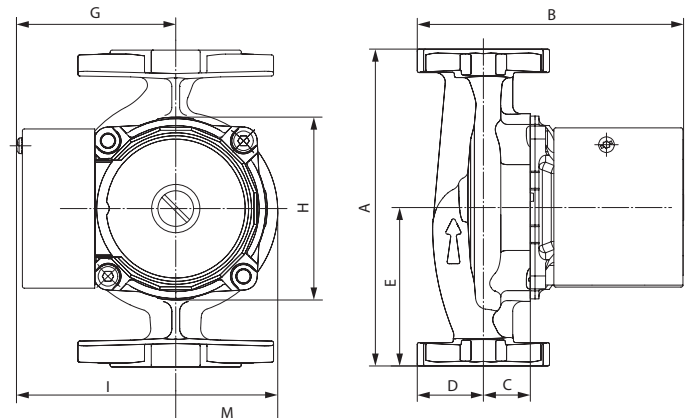
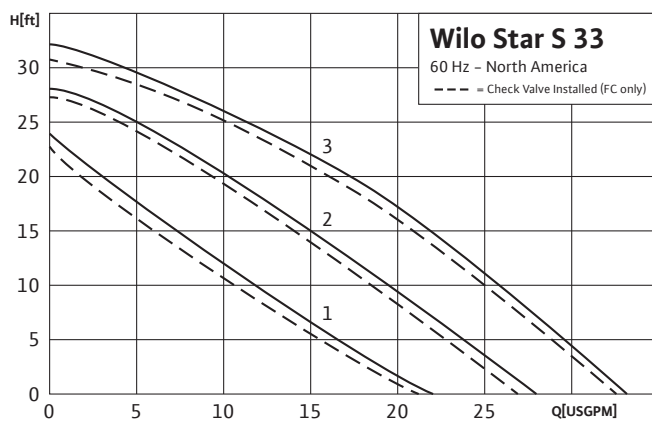


# Submittal Data Sheet



## Wilo Star – Residential Wet Rotor Circulators

Star S 33 FC							
		Project:					
		Engineer:					
		Contractor:					
		Submitted By:			Date:		
		Approved By:			Date:		
Tag #	Model #	Check Valve	Speed	Flow	Head	Phase	Voltage
	Star S 33 FC					1	



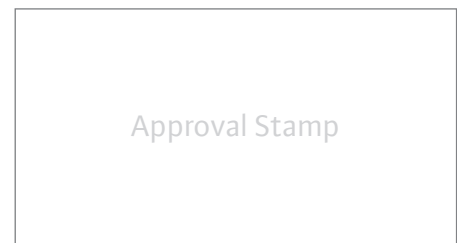
Applications	
• Heating Systems	• Air-Conditioning
• Cooling Systems	• Water/Glycol up to 50%
• Solar Systems	• Geothermal Systems

Materials of Construction	
Impeller	Engineered Composite (40% GF)
Shaft	Stainless Steel (X40 Cr13) AISI 420SS
Bearing	Metal Impregnated Carbon
Volute	Cast Iron with Installable Check Valve
Pump Housing	Cast Iron
Check Valve	Glass filled Noryl + EPDM rubber

Technical Data	
Max. Temp. Range	-14°F to 230°F (-10°C to 110°C)
Ambient Temp.	104°F (40°C)
Electrical Connections	1~115, 230
Max. Working Pressure	140 PSI (10 Bar)
Min. Inlet Pressure 122°F (50°C)	0.7 PSI (0.05 Bar)
Min. Inlet Pressure (203°F)	4.4 PSI (0.3 Bar)
Min. Inlet Pressure (230°F)	14.5 PSI (1 Bar)

Dimensions and Weights										
Model	Dimensions - Inches (mm)									Weight lbs (kg)
	A	B	C	D	E	G	H	I		
Star S 33 FC	6 <sup>3</sup> / <sub>8</sub>	7	7 <sup>7</sup> / <sub>8</sub>	2	3 <sup>3</sup> / <sub>16</sub>	3 <sup>3</sup> / <sub>16</sub>	3 <sup>11</sup> / <sub>16</sub>	5 <sup>1</sup> / <sub>16</sub>		11.0
	(162)	(178)	(22)	(50)	(81)	(81)	(93.5)	(128)		(5.0)

Motor Data					
Model	Voltage	Horsepower	Speed	Watts	FLA
		hp	RPM	W	A
Star S 33 FC	1~115v	1 <sup>1</sup> / <sub>6</sub>	1300-2700	98-202	0.85-1.8
	1~230v	1 <sup>1</sup> / <sub>6</sub>	1300-2700	115-200	0.5-0.9



# Submittal Data Sheet



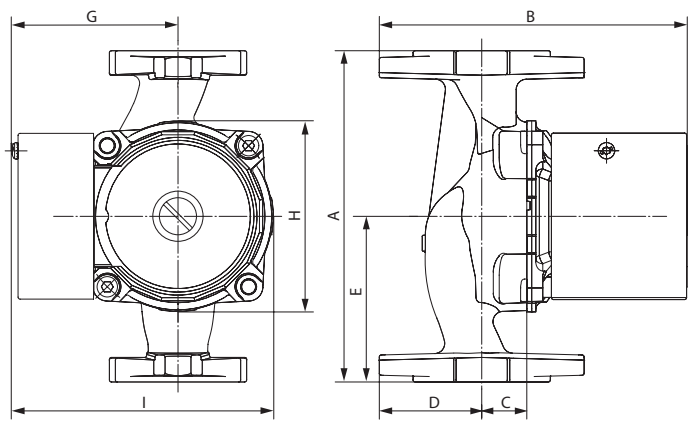
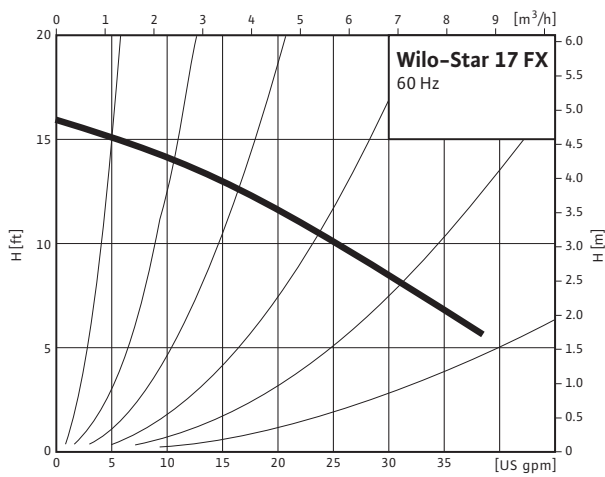
## Wilo Star – Residential Wet Rotor Circulators

### Star 17 FX



Project:			
Engineer:			
Contractor:			
Submitted By:		Date:	
Approved By:		Date:	

Tag #	Model #	Check Valve	Speed	Flow	Head	Phase	Voltage
	Star 17 FX	n/a				1	115v



#### Applications

• Heating Systems	• Air-Conditioning
• Cooling Systems	• Water/Glycol up to 50%
• Solar Systems	• Geothermal Systems

#### Materials of Construction

Impeller	Engineered Composite (40% GF)
Shaft	Stainless Steel (X40 Cr13) AISI 420SS
Bearing	Metal Impregnated Carbon
Volute	Cast Iron
Pump Housing	Cast Iron

#### Technical Data

Max. Temp. Range	-14°F to 230°F (-10°C to 110°C)
Ambient Temp.	104°F (40°C)
Electrical Connections	1-115
Max. Working Pressure	140 PSI (10 Bar)
Min. Inlet Pressure 122°F (50°C)	0.7 PSI (0.05 Bar)
Min. Inlet Pressure (203°F)	4.4 PSI (0.3 Bar)
Min. Inlet Pressure (230°F)	14.5 PSI (1 Bar)

#### Dimensions and Weights

Model	Dimensions - Inches (mm)								Weight lbs (kg)
	A	B	C	D	E	G	H	I	
Star 17 FX	8½	7	1¼	2 <sup>3</sup> / <sub>16</sub>	4¼	3 <sup>2</sup> / <sub>9</sub>	3 <sup>7</sup> / <sub>9</sub>	5 <sup>1</sup> / <sub>8</sub>	10.8
	(216)	(176)	(33)	(55)	(108)	(82)	(96)	(130)	(4.9)

#### Motor Data


Model	Horsepower hp	Speed RPM	Watts W	FLA A
Star 17 FX	1/10	3000	166	1.45

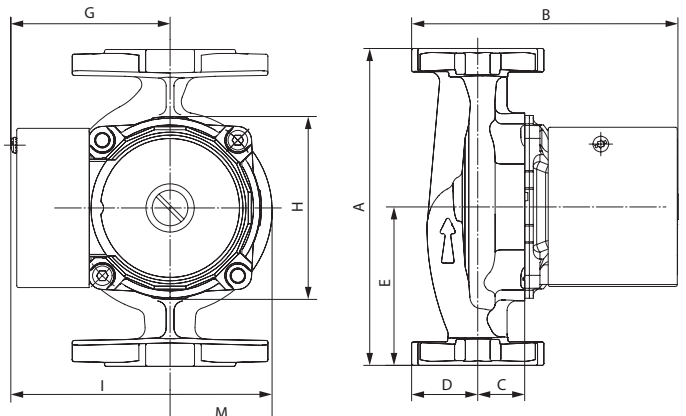


# Submittal Data Sheet



## Wilo Star – Residential Wet Rotor Circulators

Star 32 F							
		Project:					
		Engineer:					
		Contractor:					
		Submitted By:			Date:		
		Approved By:			Date:		
Tag #	Model #	Check Valve	Speed	Flow	Head	Phase	Voltage
	Star 32 F	n/a				1	115v



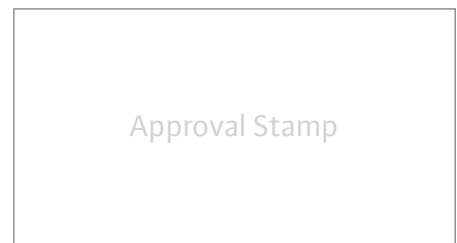
Applications	
• Heating Systems	• Air-Conditioning
• Cooling Systems	• Water/Glycol up to 50%
• Solar Systems	• Geothermal Systems

Materials of Construction	
Impeller	Engineered Composite (40% GF)
Shaft	Stainless Steel (X40 Cr13) AISI 420SS
Bearing	Metal Impregnated Carbon
Volute	Cast Iron
Pump Housing	Cast Iron

Technical Data	
Max. Temp. Range	-14°F to 230°F (-10°C to 110°C)
Ambient Temp.	104°F (40°C)
Electrical Connections	1-115
Max. Working Pressure	140 PSI (10 Bar)
Min. Inlet Pressure 122°F (50°C)	0.7 PSI (0.05 Bar)
Min. Inlet Pressure (203°F)	4.4 PSI (0.3 Bar)
Min. Inlet Pressure (230°F)	14.5 PSI (1 Bar)

Dimensions and Weights										
Model	Dimensions - Inches (mm)									Weight lbs (kg)
	A	B	C	D	E	G	H	I	M	
Star 30 F	6 <sup>3</sup> / <sub>8</sub>	5 <sup>3</sup> / <sub>8</sub>	1 <sup>5</sup> / <sub>16</sub>	1 <sup>5</sup> / <sub>16</sub>	3 <sup>3</sup> / <sub>16</sub>	3 <sup>3</sup> / <sub>16</sub>	3 <sup>11</sup> / <sub>16</sub>	5 <sup>1</sup> / <sub>16</sub>	2 <sup>1</sup> / <sub>16</sub>	6.7
	(162)	(136)	(24)	(34)	(81)	(81)	(93.5)	(128)	(52)	(3.1)

Motor Data				
Model	Horsepower hp	Speed RPM	Watts W	FLA A
Star 30 F	1/20	2700	101	0.92



# Submittal Data Sheet

Wilco Star – Residential Wet Rotor Circulators

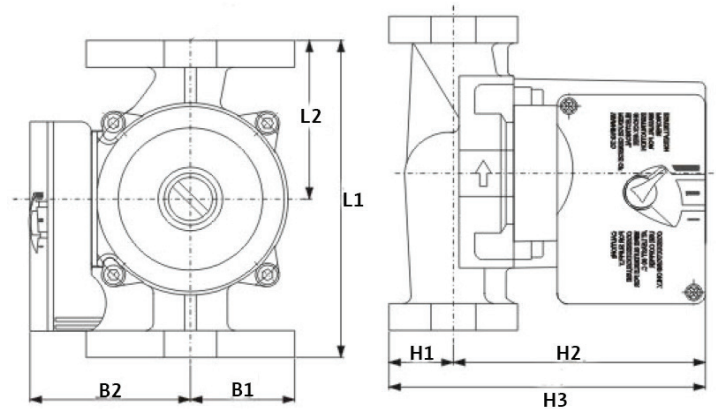
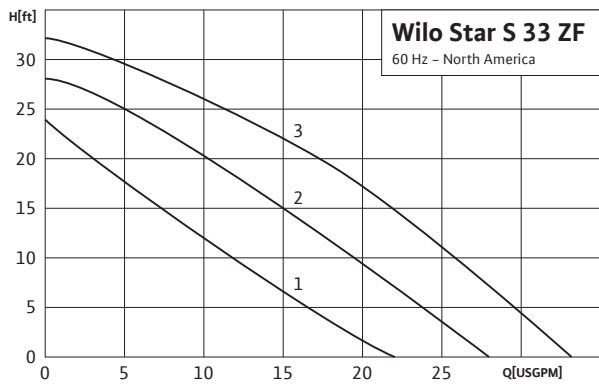


## Star S 33 ZF



Project:	
Engineer:	
Contractor:	
Submitted By:	Date:
Approved By:	Date:

Tag #	Model #	Check Valve	Speed	Flow	Head	Phase	Voltage
	Star S 33 ZF	n/a				1	115v



### Applications

- Open Systems
- Heating & Cooling
- Solar Systems
- Air-Conditioning
- Water/Glycol up to 50%
- Geothermal Systems

### Materials of Construction

Impeller	Engineered Composite
Shaft	Stainless Steel (1Cr18Ni9Ti)
Bearing	Metal Impregnated Carbon
Volute	Stainless Steel (304)

### Technical Data

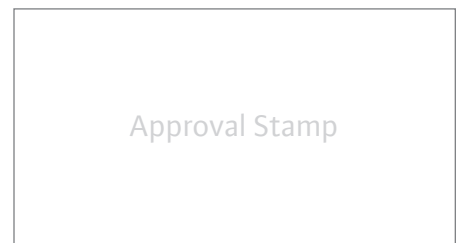
Max. Temp. Range	32°F to 230°F (0°C to 110°C)
Ambient Temp.	104°F (40°C)
Electrical Connections	1-115
Max. Working Pressure	140 PSI (10 Bar)
Min. Inlet Pressure (122°F (50°C))	0.7 PSI (0.05 Bar)
Min. Inlet Pressure (203°F)	4.4 PSI (0.3 Bar)
Min. Inlet Pressure (230°F)	14.5 PSI (1 Bar)

### Dimensions and Weights

Model	Dimensions – Inches (mm)							Weight lbs (kg)
	H1	H2	H3	L1	L2	B1	B2	
Star S 33 ZF	1 <sup>3</sup> / <sub>8</sub>	4 <sup>5</sup> / <sub>8</sub>	6	6 <sup>3</sup> / <sub>8</sub>	3 <sup>3</sup> / <sub>16</sub>	1 <sup>7</sup> / <sub>8</sub>	3 <sup>3</sup> / <sub>16</sub>	11.0
	(35)	(115)	(150)	(162)	(81)	(48)	(81)	(5.0)

### Motor Data



Model	Horsepower	Speed	Watts	FLA
	hp	RPM	W	A
Star S 33 ZF	1/6	1300-2700	135-230	1.2-2.0

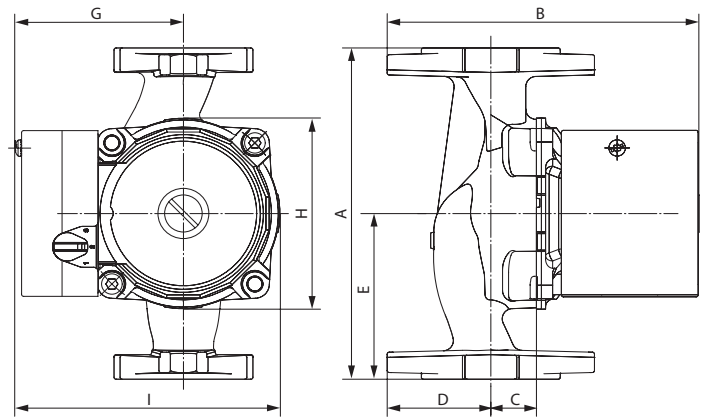
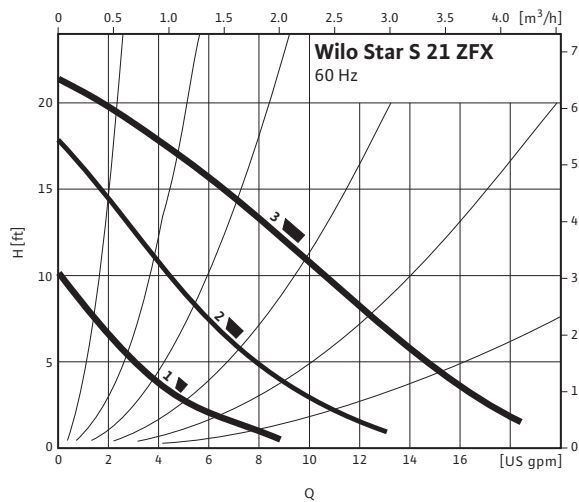


# Submittal Data Sheet



## Wilo Star – Residential Wet Rotor Circulators

Star S 21 ZFX							
 		Project:					
		Engineer:					
		Contractor:					
		Submitted By:			Date:		
		Approved By:			Date:		
Tag #	Model #	Check Valve	Speed	Flow	Head	Phase	Voltage
	Star S 21 ZFX	n/a				1	115v



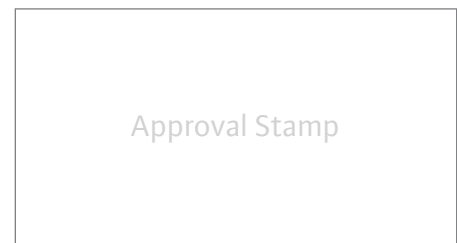
Applications	
• Domestic Hot Water	• Air-Conditioning
• Heating & Cooling	• Water/Glycol up to 50%
• Solar Systems	• Geothermal Systems

Materials of Construction	
Impeller	Engineered Composite (40% GF)
Shaft	Stainless Steel AISI 420SS
Bearing	Metal Impregnated Carbon
Volute	Stainless Steel
Pump Housing	Stainless Steel AISI 316L

Technical Data	
Max. Temp. Range	-14°F to 230°F (-10°C to 110°C)
Ambient Temp.	104°F (40°C)
Electrical Connections	1-115
Max. Working Pressure	140 PSI (10 Bar)
Min. Inlet Pressure 122°F (50°C)	0.7 PSI (0.05 Bar)
Min. Inlet Pressure (203°F)	4.4 PSI (0.3 Bar)
Min. Inlet Pressure (230°F)	14.5 PSI (1 Bar)

Dimensions and Weights									
Model	Dimensions - Inches (mm)								Weight lbs (kg)
	A	B	C	D	E	G	H	I	
Star S 21 ZFX	6 <sup>3</sup> / <sub>8</sub>	6 <sup>3</sup> / <sub>8</sub>	7 <sup>7</sup> / <sub>8</sub>	2	3 <sup>3</sup> / <sub>16</sub>	3 <sup>3</sup> / <sub>16</sub>	3 <sup>11</sup> / <sub>16</sub>	5 <sup>1</sup> / <sub>16</sub>	6.5
	(162)	(154)	(22)	(50)	(81)	(81)	(93.5)	(128)	(3.0)

Motor Data				
Model	hp	Speed RPM	Watts W	FLA A
Star S 21 ZFX	1/25	1300-2700	60-110	0.52-0.96



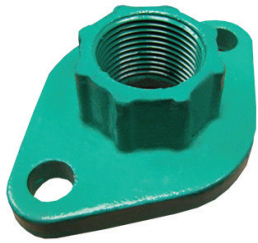


# Submittal Data Sheet

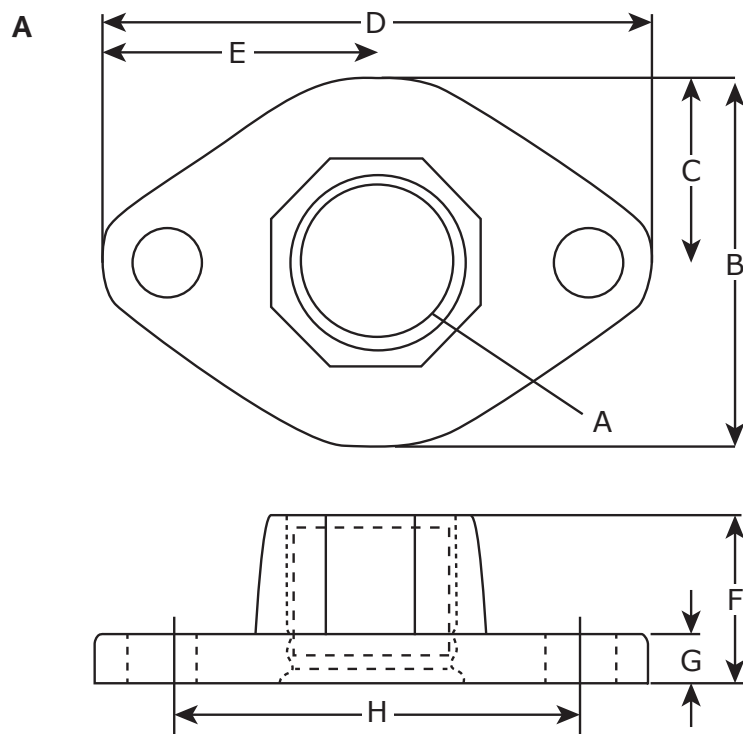
## Residential Cast Iron Flanges



### Residential Cast Iron Flanges



Project:			
Engineer:			
Contractor:			
Submitted By:		Date:	
Approved By:		Date:	



### Dimensions and Weights

Dimensions - Inches

Article Number	Size A	B	C	D	E	F	G	H
2706062	3/4" NPT	2 3/4"	1 3/8"	4 1/8"	2 1/16"	1"	3/8"	3 3/8"
2706063	1" NPT	2 3/4"	1 3/8"	4 1/8"	2 1/16"	1"	3/8"	3 3/8"
2706064	1 1/4" NPT	2 3/4"	1 3/8"	4 1/8"	2 1/16"	1"	3/8"	3 3/8"
2706065	1 1/2" NPT	2 3/4"	1 3/8"	4 1/8"	2 1/16"	1"	3/8"	3 3/8"