

# FILL-RITE®

PROUDLY MANUFACTURED BY TUTHILL

## H-SERIES TECHNICAL DATA SHEET

SERIES: FR1200, FR2400, FR4200, FR4400, FR600, SD1200, SD600

A series of fuel transfer pumps with UL/cUL certifications that are compatible with gasoline, diesel, fuel blends such as biodiesel up to 20% and gasoline with up to 15% ethanol, mineral spirits, and kerosene.

PRODUCT PARTS	PRODUCT MATERIALS
Pump Housing	Cast Iron
Rotor	Powdered Iron
Vane	Sintered Bronze
Strainer Mesh	Stainless Steel
Wetted	Buna-N, Fluorocarbon, Ceramic, Cork, Thermoset, Steel, Stainless Steel

		DESCRIPTION	FR1200	FR4200	SD1200	FR4400	FR2400	FR600	SD600	
MOTOR	VOLTAGE, SUPPLY (DC/AC)		12V DC			24V DC		115V AC / 60HZ		
	POWER (HP)		1/4 <sup>TH</sup>					1/6 <sup>TH</sup>		
	AMPS (FULL LOAD)		26	28	26	18	15	2.5		
	AMPS (RATED)		20	19	20	13	10	2.0		
	RPM		2600 RPM					2000 RPM		
	POWER CORD*	LENGTH	18'		15'	18'		NOT INCLUDED		
		AWG	12							
	DUTY CYCLE		30 MINUTES (ON), THEN 30 MINUTES (OFF)							
	THERMAL PROTECTION (MOTOR)		YES							
RECOMMENDED CIRCUIT PROTECTION		30 AMP			20 AMP		15 AMP			

\*Power cord not included in pump only models.

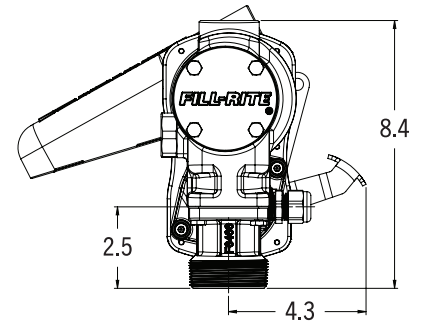
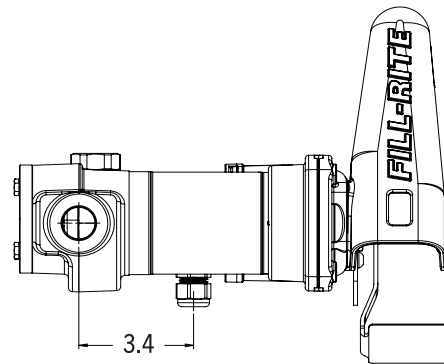
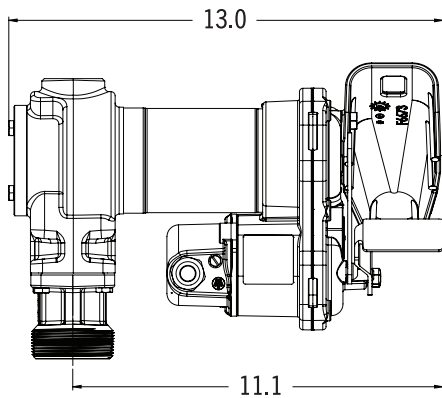
		DESCRIPTION	FR1200	FR4200	SD1200	FR4400	FR2400	FR600	SD600
PUMP	MAXIMUM GPM		15	20	13	20	15		13
	BYPASS PRESSURE		16 PSI						
	MINIMUM DRY VAC		5 IN-HG						
	AT SEA LEVEL 70° F (21.1° C)	SUCTION LIFT	8' MAXIMUM						
		OUTLET HEAD	37' MAXIMUM						
	INLET		1" NPT						
	OUTLET		3/4" NPT	1" NPT	3/4" NPT	1" NPT	3/4" NPT		
	MOUNT		2" NPT INLET BUNG						
WARRANTY		LIMITED LIFETIME WARRANTY†		1 YEAR	LIMITED LIFETIME WARRANTY†			1 YEAR	

# H-SERIES MODEL INFORMATION: FR1200, FR2400, FR4200, FR4400, FR600, SD1200, SD600

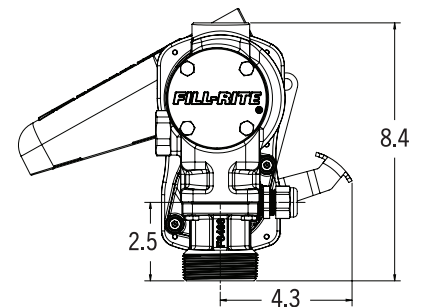
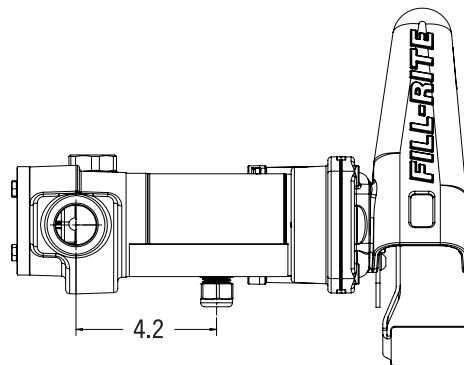
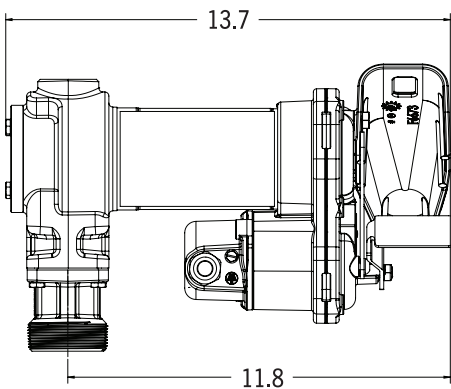
MODEL NUMBER	NOZZLE	HOSE	METER	INLET TUBE	POWER CORD	SPECIAL	VOLTAGE	OUTLET
FR1204H	PUMP ONLY MODEL						12V DC	3/4"
FR1210H	MANUAL	12'		METAL, TELESCOPING, 20" - 34 1/2"	12 AWG AT 18'			
FR1210HA	AUTO GASOLINE	12'						
FR1210HA1	AUTO DIESEL	12'						
FR1210HARC	AUTO ARCTIC	15'				SWIVEL		
FR1210HN								
FR1211H	MANUAL	12'	807C					
FR1211HL	MANUAL	12'	807CL					
FR1211HLN			807CL					
FR1211HN			807C					
FR1219H	MANUAL	12'	TT10AN					
FR2404H	PUMP ONLY MODEL						24V DC	
FR2410H	MANUAL	12'		METAL, TELESCOPING, 20" - 34 1/2"	12 AWG AT 18'			
FR2411H	MANUAL	12'	807C					
FR2411HL	MANUAL	12'	807CL					
FR4204H	PUMP ONLY MODEL						12V DC	1"
FR4210H	MANUAL	12'		METAL, TELESCOPING, 20" - 34 1/2"	12 AWG AT 18'			
FR4210HARC	AUTO ARCTIC	20'				SWIVEL		
FR4210HB	ULTRA HI-FLOW	12'						
FR4210HD	AUTO DIESEL	12'						
FR4210HDS	AUTO DIESEL	12'				SWIVEL		
FR4210HBFQ	ULTRA HI-FLOW	18'			10 AWG AT 25' WITH CLAMPS	FILTER		
FR4210HN					12 AWG AT 18'			
FR4211H	MANUAL	12'	901C					
FR4211HL	MANUAL	12'	901CL					
FR4211HLN			901CL					
FR4211HN			901C					
FR4219H	MANUAL	12'	TT10AN					
FR4406H	PUMP ONLY MODEL						24V DC	
FR4410H	MANUAL	12'		METAL, TELESCOPING, 20" - 34 1/2"				
FR604H	PUMP ONLY MODEL						115V AC	
FR610H	MANUAL	12' UL		METAL, TELESCOPING, 20" - 34 1/2"				
FR610HA	AUTO GASOLINE	12' UL						
SD1202H	MANUAL	10'		PVC, 15 1/4" - 29 1/4"	12 AWG AT 15'		3/4"	
SD1202HA	AUTO GASOLINE	10'			12 AWG AT 15'	12V DC		
SD602H	MANUAL	12' UL		PVC, 15 1/4" - 43 1/4"		115V AC		

# DIMENSIONAL DATA INFORMATION

FR1200, FR2400, FR4400, FR600, SD1200, and SD600 (Dimensions displayed in inches)

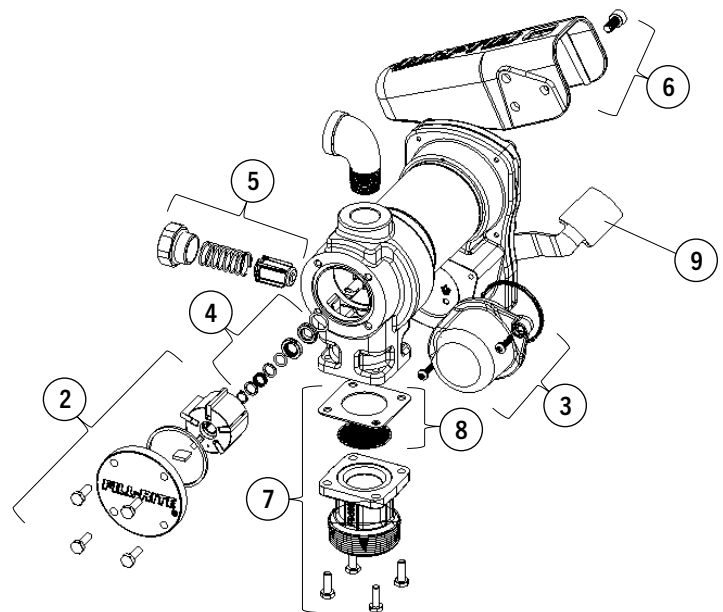


FR4200 (Dimensions displayed in inches)



# KIT INFORMATION

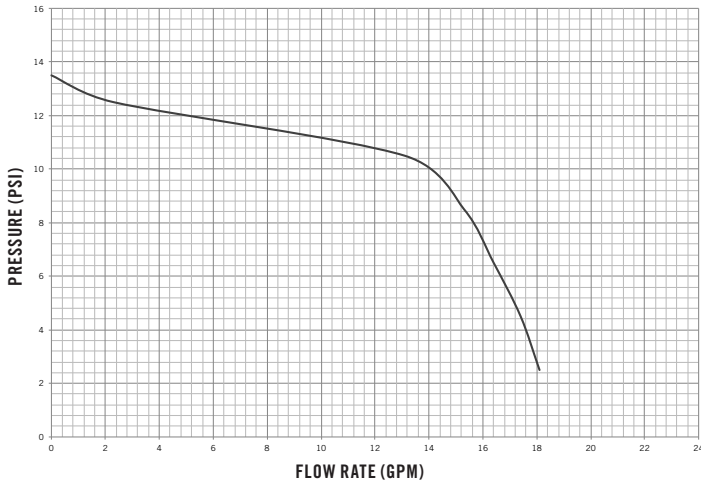
#	Kit	Description	Parts
1	KIT120BD*	BioDiesel Kit*	O-ring seal, bypass valve poppet, bypass cap seal, inlet seal
2	KIT120RGG	Rotor and Vane Kit	Rotor cover, rotor, vanes, rotor key, O-ring seal, attaching hardware
3	KIT120JCH	Junction Cover Kit	Junction cover, seal, fasteners
4	KIT120SL	Seal Kit	O-ring, shaft seals, retainer clip
5	KIT120BV	Bypass Service Kit	Bypass valve, valve spring, bypass cap, O-ring seal
6	KIT120NB	Nozzle Boot Kit	Nozzle boot, attaching hardware
7	KIT120BG	Inlet Flange Kit	Inlet flange (bung), attaching hardware, inlet seal, screen
8	KIT120SG	Inlet Gasket and Screen	Gasket for inlet (bung) and screen
9	KIT120SWH	Switch Lever Kit	Switch lever, mounting hardware



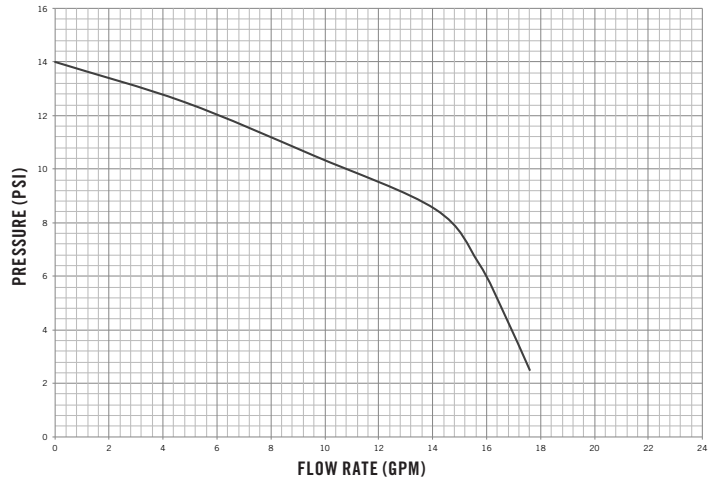
\*KIT120BD not called out in diagram to the right

# PERFORMANCE CURVES: FR1200, FR2400, FR4200, FR4400, and FR600 SERIES

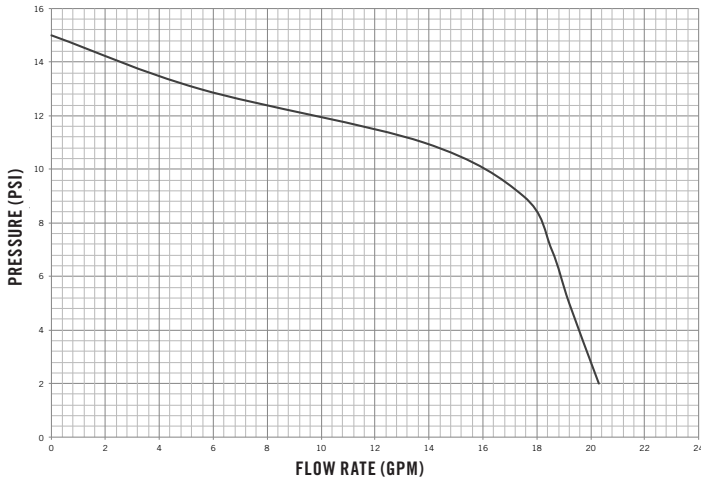
PERFORMANCE CURVE: 1200 SERIES (12V DC)



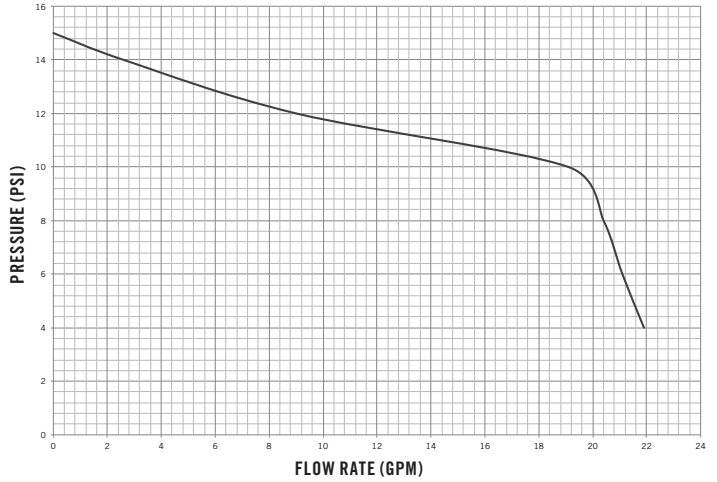
PERFORMANCE CURVE: 2400 SERIES (24V DC)



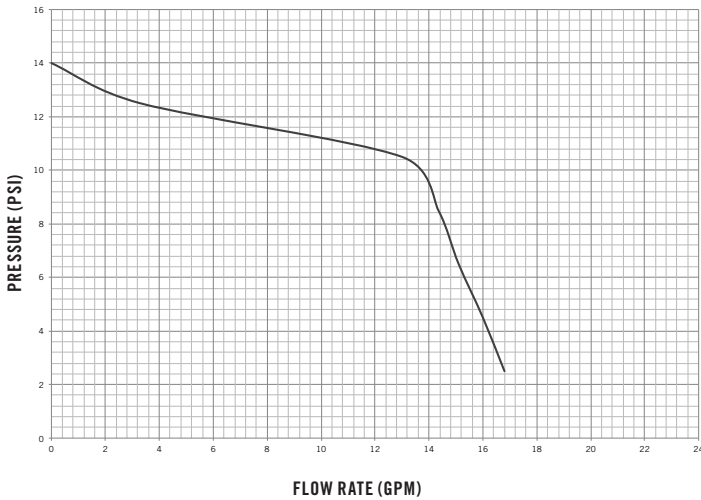
PERFORMANCE CURVE: 4200 SERIES (12V DC)

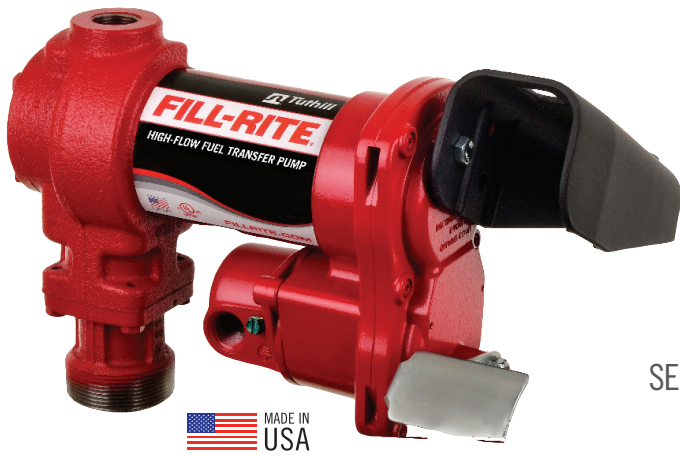


PERFORMANCE CURVE: 4400 SERIES (24V DC)



PERFORMANCE CURVE: 600 SERIES (115V AC)





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A series of fuel transfer pumps with UL/cUL certifications that are compatible with gasoline, diesel, fuel blends such as biodiesel up to 20% and gasoline with up to 15% ethanol, mineral spirits, and kerosene.

PRODUCT PARTS	PRODUCT MATERIALS
Pump Housing	Cast Iron
Rotor	Powdered Iron
Vane	Sintered Bronze
Strainer Mesh	Stainless Steel
Wetted	Buna-N, Fluorocarbon, Ceramic, Cork, Thermoset, Steel, Stainless Steel

		DESCRIPTION	FR1200	FR4200	SD1200	FR4400	FR2400	FR600	SD600	
MOTOR	VOLTAGE, SUPPLY (DC/AC)		12V DC			24V DC		115V AC / 60HZ		
	POWER (HP)		1/4 <sup>TH</sup>					1/6 <sup>TH</sup>		
	AMPS (FULL LOAD)		26	28	26	18	15	2.5		
	AMPS (RATED)		20	19	20	13	10	2.0		
	RPM		2600 RPM					2000 RPM		
	POWER CORD*	LENGTH	18'		15'	18'		NOT INCLUDED		
		AWG	12							
	DUTY CYCLE		30 MINUTES (ON), THEN 30 MINUTES (OFF)							
	THERMAL PROTECTION (MOTOR)		YES							
RECOMMENDED CIRCUIT PROTECTION		30 AMP			20 AMP		15 AMP			

\*Power cord not included in pump only models.

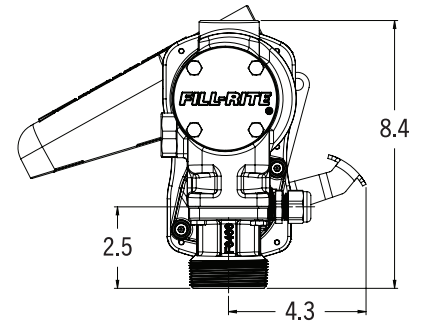
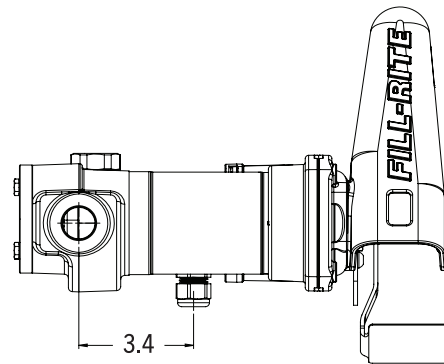
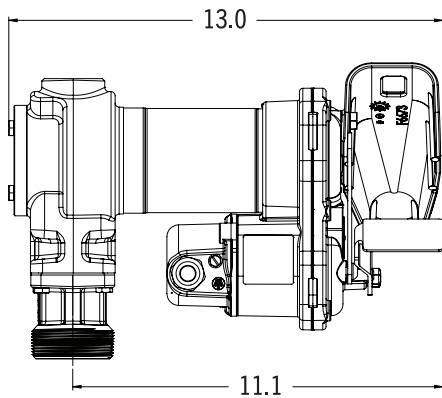
		DESCRIPTION	FR1200	FR4200	SD1200	FR4400	FR2400	FR600	SD600	
PUMP	MAXIMUM GPM		15	20	13	20	15		13	
	BYPASS PRESSURE		16 PSI							
	MINIMUM DRY VAC		5 IN-HG							
	AT SEA LEVEL 70° F (21.1° C)	SUCTION LIFT	8' MAXIMUM							
		OUTLET HEAD	37' MAXIMUM							
	INLET		1" NPT							
	OUTLET		3/4" NPT	1" NPT	3/4" NPT	1" NPT	3/4" NPT			
	MOUNT		2" NPT INLET BUNG							
WARRANTY		LIMITED LIFETIME WARRANTY†			1 YEAR	LIMITED LIFETIME WARRANTY†			1 YEAR	

# H-SERIES MODEL INFORMATION: FR1200, FR2400, FR4200, FR4400, FR600, SD1200, SD600

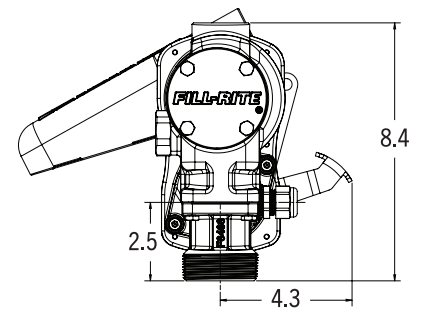
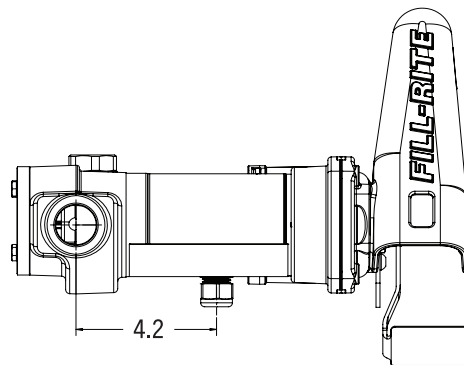
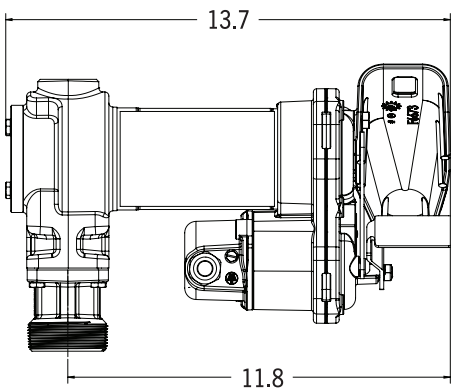
MODEL NUMBER	NOZZLE	HOSE	METER	INLET TUBE	POWER CORD	SPECIAL	VOLTAGE	OUTLET		
FR1204H	PUMP ONLY MODEL						12V DC	3/4"		
FR1210H	MANUAL	12'		METAL, TELESCOPING, 20" - 34 1/2"	12 AWG AT 18'					
FR1210HA	AUTO GASOLINE	12'								
FR1210HA1	AUTO DIESEL	12'								
FR1210HARC	AUTO ARCTIC	15'				SWIVEL				
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FR2404H	PUMP ONLY MODEL								24V DC	
FR2410H	MANUAL	12'				METAL, TELESCOPING, 20" - 34 1/2"	12 AWG AT 18'			
FR2411H	MANUAL	12'	807C							
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FR4204H	PUMP ONLY MODEL							12V DC	1"	
FR4210H	MANUAL	12'		METAL, TELESCOPING, 20" - 34 1/2"	12 AWG AT 18'					
FR4210HARC	AUTO ARCTIC	20'				SWIVEL				
FR4210HB	ULTRA HI-FLOW	12'								
FR4210HD	AUTO DIESEL	12'								
FR4210HDS	AUTO DIESEL	12'				SWIVEL				
FR4210HBFQ	ULTRA HI-FLOW	18'				10 AWG AT 25' WITH CLAMPS	FILTER			
FR4210HN					12 AWG AT 18'					
FR4211H	MANUAL	12'	901C							
FR4211HL	MANUAL	12'	901CL							
FR4211HLN			901CL							
FR4211HN			901C							
FR4219H	MANUAL	12'	TT10AN							
FR4406H	PUMP ONLY MODEL						24V DC			
FR4410H	MANUAL	12'				METAL, TELESCOPING, 20" - 34 1/2"				
FR604H	PUMP ONLY MODEL						115V AC	3/4"		
FR610H	MANUAL	12' UL		METAL, TELESCOPING, 20" - 34 1/2"						
FR610HA	AUTO GASOLINE	12' UL								
SD1202H	MANUAL	10'		PVC, 15 1/4" - 29 1/4"	12 AWG AT 15'		12V DC			
SD1202HA	AUTO GASOLINE	10'			12 AWG AT 15'					
SD602H	MANUAL	12' UL		PVC, 15 1/4" - 43 1/4"			115V AC			

# DIMENSIONAL DATA INFORMATION

FR1200, FR2400, FR4400, FR600, SD1200, and SD600 (Dimensions displayed in inches)

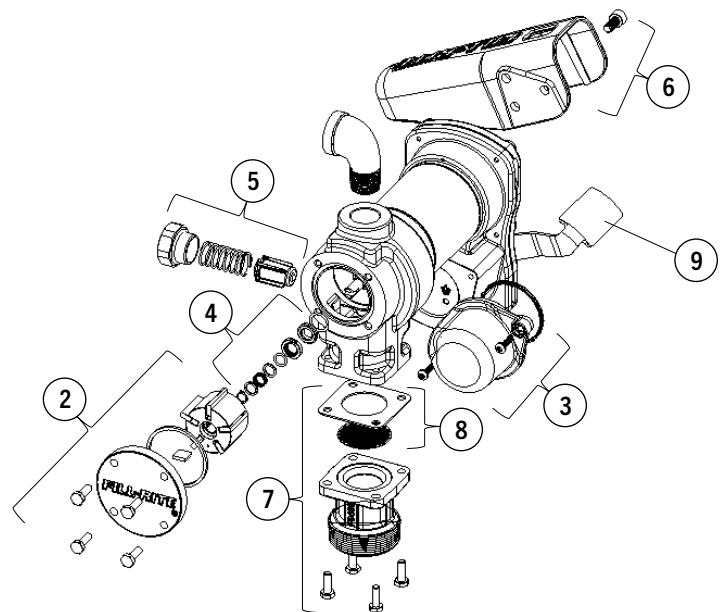


FR4200 (Dimensions displayed in inches)



# KIT INFORMATION

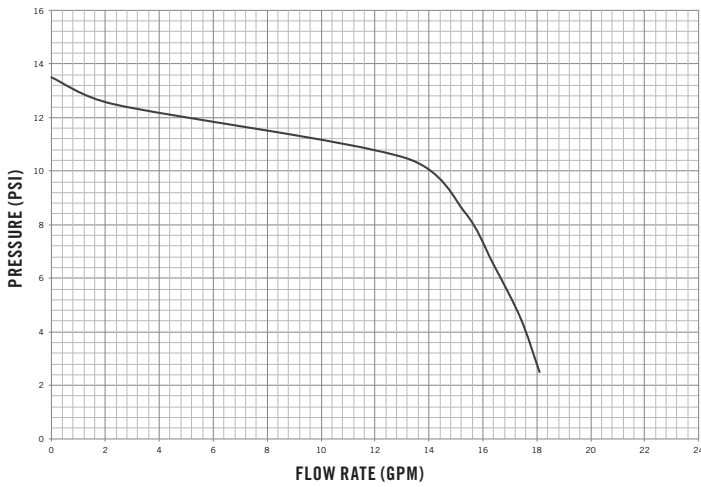
#	Kit	Description	Parts
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2	KIT120RGG	Rotor and Vane Kit	Rotor cover, rotor, vanes, rotor key, O-ring seal, attaching hardware
3	KIT120JCH	Junction Cover Kit	Junction cover, seal, fasteners
4	KIT120SL	Seal Kit	O-ring, shaft seals, retainer clip
5	KIT120BV	Bypass Service Kit	Bypass valve, valve spring, bypass cap, O-ring seal
6	KIT120NB	Nozzle Boot Kit	Nozzle boot, attaching hardware
7	KIT120BG	Inlet Flange Kit	Inlet flange (bung), attaching hardware, inlet seal, screen
8	KIT120SG	Inlet Gasket and Screen	Gasket for inlet (bung) and screen
9	KIT120SWH	Switch Lever Kit	Switch lever, mounting hardware



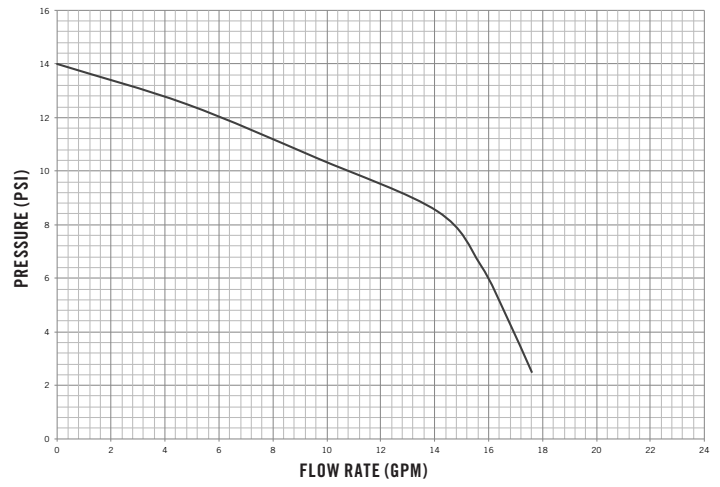
\*KIT120BD not called out in diagram to the right

# PERFORMANCE CURVES: FR1200, FR2400, FR4200, FR4400, and FR600 SERIES

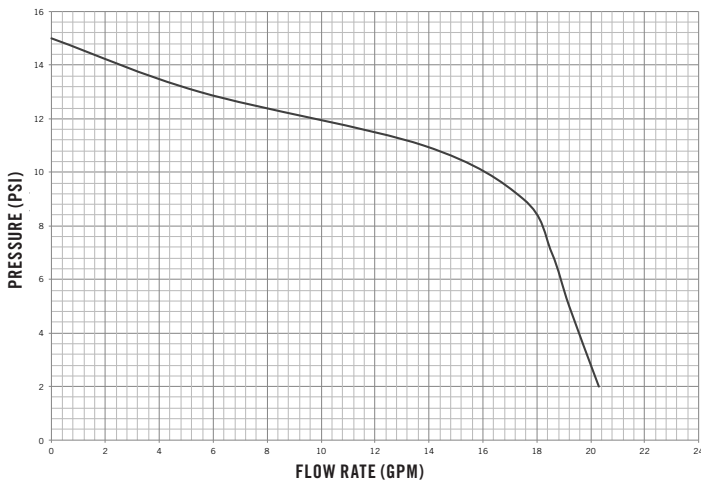
### PERFORMANCE CURVE: 1200 SERIES (12V DC)



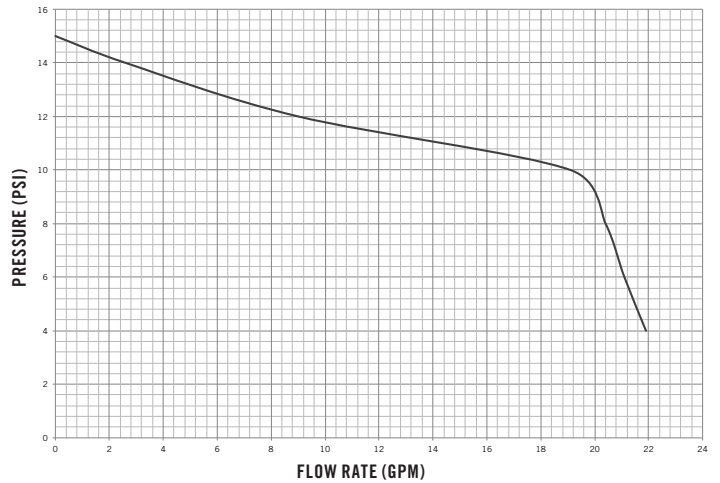
### PERFORMANCE CURVE: 2400 SERIES (24V DC)



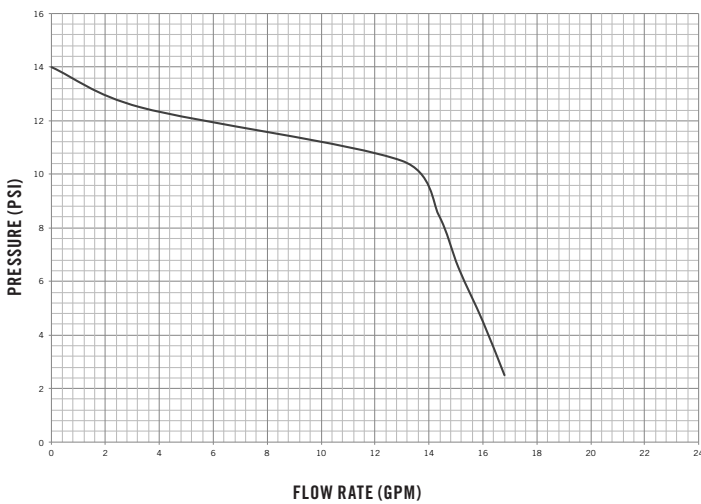
### PERFORMANCE CURVE: 4200 SERIES (12V DC)



### PERFORMANCE CURVE: 4400 SERIES (24V DC)



### PERFORMANCE CURVE: 600 SERIES (115V AC)



Learn more about fuel transfer systems and parts we have.