

# CONSTANT PRESSURE SYSTEMS



# CONSTANT PRESSURE SUBDRIVE & MONODRIVE

## Let Us Handle the Pressure

Franklin Electric's SubDrive and MonoDrive constant pressure controllers provide constant pressure by continually adjusting the speed of the pump to match water demand. Instead of draining and filling a large tank, a SubDrive system pumps more or less water as you need it. Finally, you'll be able to run the dishwasher, do laundry and water the lawn – all at the same time!

### How MonoDrive is Different

While SubDrive provides constant pressure using single-phase input power with a three-phase motor, MonoDrive is designed to provide constant pressure for single-phase, three-wire systems – even those already in place. You can have constant pressure just by replacing a three-wire control box!

### Benefits

- Constant water pressure with a wide range of settings (25 to 80 psi)
- Easy installation
- Soft start feature prevents water hammer and increases motor life
- Works with small pressure tanks or existing larger tanks
- Smart Reset® technology allows well recovery before restarting the pump
- Single-phase input power with three-phase motor performance (SubDrive models)
- Excellent radio frequency interference shielding
- UL and CUL listed





## Built-in Diagnostics and Protection

SubDrive and MonoDrive products all include diagnostic features and built-in protection for conditions that would be harmful to the system.

- Surge protection
- Open circuit
- Underload
- Short circuit
- Undervoltage
- Overheated controller
- Locked pump

## Applications

- Residential homes
- Schools
- Restaurants
- Car washes
- Farms
- Landscape irrigation systems

## Enclosure Options

### ■ NEMA 1:

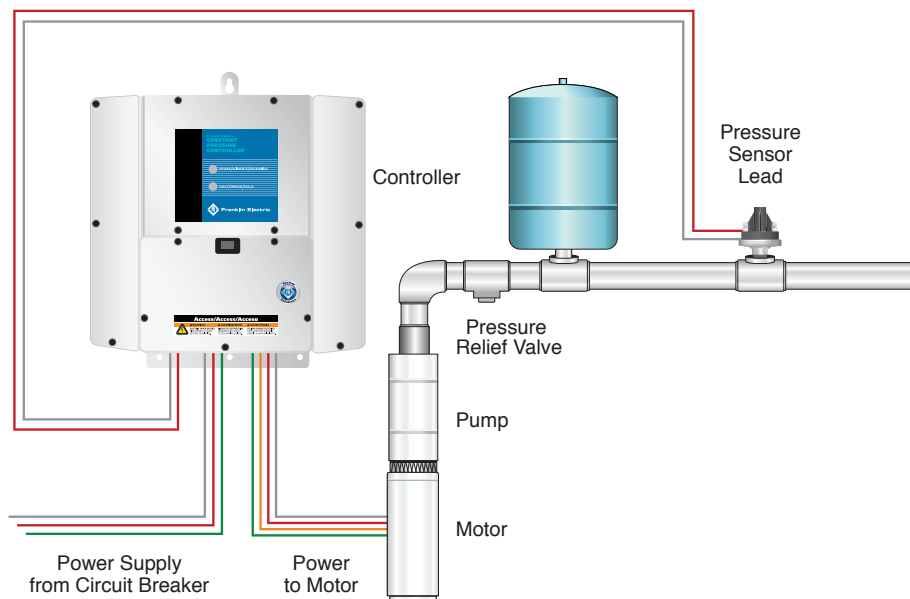
The NEMA 1 enclosure is rated for indoor use only. It is ideal for installation in garages, basements and pump houses where there is no risk of rain, blowing dust or other harsh conditions. This enclosure comes standard in all models except the SD300.

### ■ NEMA 4:

The NEMA 4 weatherproof enclosure is designed for both indoor and outdoor use and offers robust protection against harsh environmental conditions. This enclosure comes standard with the SD300 and is optional for the other models.



## Constant Pressure System



# Specifications

		MonoDrive	MonoDriveXT	SubDrive75	SubDrive100	SubDrive150	SubDrive300
Model No. (Enclosure*)	(N1)	587 020 3110	587 020 4110	587 020 3380	587 020 4100	587 020 4150	N/A
	(N4)	587 020 3114	587 020 4114	587 020 3384	587 020 4104	587 020 4154	587 020 6300
<b>Input (From Power Source)</b>							
Voltage		190-260 V 1-Phase	190-260 V 1-Phase	190-260 V 1-Phase	190-260 V 1-Phase	190-260 V 1-Phase	190-260 V 1-Phase
Frequency		60/50 Hz	60/50 Hz	60/50 Hz	60/50 Hz	60/50 Hz	60/50 Hz
Max Amps (RMS)		5.7 A (½ hp), 8.7 A (¾ hp), 11 A (1 hp)	13 A (1.5 hp), 16 A (2 hp)	11 A	19 A	23 A	36 A
Power Factor		1 (Constant)	1 (Constant)	1 (Constant)	1 (Constant)	1 (Constant)	1 (Constant)
<b>Output (To Motor)</b>							
Voltage		Variable/1-Phase	Variable/1-Phase	Variable/3-Phase	Variable/3-Phase	Variable/3-Phase	Variable/3-Phase
Frequency		Variable (30-60 Hz)	Variable (30-60 Hz)	Variable (30-80 Hz)	Variable (30-80 Hz)	Variable (30-80 Hz)	Variable (30-80 Hz)
Max Amps (RMS)		4.0 A (½ hp), 6.6 A (¾ hp), 9.0 A (1 hp)	10 A (1.5 hp), 12 A (2 hp)	5.9 A	8.1 A	10.9 A	17.8 A
<b>For Use With:</b>							
Pump Rating		½, ¾ or 1 hp (Selectable)	1.5 or 2 hp (Selectable)	¾, 1 or 1.5 hp (Selectable)	1, 1.5 or 2 hp (Selectable)	1.5, 2 or 3 hp (Selectable)	3 or 5 hp (Selectable)
Motor Rating		½, ¾ or 1 hp, 230 VAC (1-Phase)	1.5 or 2 hp, 230 VAC (1-Phase)	1.5 hp, 230 VAC (3-Phase)	2 hp, 230 VAC (3-Phase)	3 hp, 230 VAC (3-Phase)	5 hp, 230 VAC (3-Phase)
Pressure Sensor (Included)		External	External	External	External	External	External
Controller Weight	(N1)	15.00 lbs (6.80 kg)	17.50 lbs (7.94 kg)	15.00 lbs (6.80 kg)	17.50 lbs (7.94 kg)	17.50 lbs (7.94 kg)	N/A
	(N4)	24.14 lbs (10.95 kg)	28.32 lbs (12.84 kg)	24.14 lbs (10.95 kg)	28.32 lbs (12.84 kg)	28.32 lbs (12.84 kg)	35.15 lbs (15.94 kg)
Carton Size (H x W x D)	(N1)	16½ x 12¾ x 9" 41.9 x 31.4 x 22.9 cm	16½ x 12¾ x 9" 41.9 x 31.4 x 22.9 cm	16½ x 12¾ x 9" 41.9 x 31.4 x 22.9 cm	16½ x 12¾ x 9" 41.9 x 31.4 x 22.9 cm	16½ x 12¾ x 9" 41.9 x 31.4 x 22.9 cm	N/A
	(N4)	17½ x 16¾ x 11¾" 44.5 x 41.6 x 28.9 cm	17½ x 16¾ x 11¾" 44.5 x 41.6 x 28.9 cm	17½ x 16¾ x 11¾" 44.5 x 41.6 x 28.9 cm	17½ x 16¾ x 11¾" 44.5 x 41.6 x 28.9 cm	17½ x 16¾ x 11¾" 44.5 x 41.6 x 28.9 cm	19½ x 17½ x 14¼" 50.5 x 44.5 x 36.2 cm
Shipping Weight	(N1)	19.23 lbs (8.72 kg)	21.28 lbs (9.65 kg)	19.23 lbs (8.72 kg)	21.28 lbs (9.65 kg)	21.28 lbs (9.65 kg)	N/A
	(N4)	30.91 lbs (14.02 kg)	35.09 lbs (15.92 kg)	30.91 lbs (14.02 kg)	35.09 lbs (15.92 kg)	35.09 lbs (15.92 kg)	40.95 lbs (18.57 kg)

\*N1 = NEMA 1 (Indoors), N4 = NEMA 4 (Outdoors)

# System Accessories

## SubDrive Duplex Alternator

The SubDrive Alternator allows a water system to alternate between two parallel pumps controlled by separate SubDrives or MonoDrives. The user-selected switching interval balances the run time of each pump system to evenly disperse the workload. In addition, when demand exceeds the capacity of one pumping system, the other system comes online to supplement production. The SubDrive Alternator can be used with any SubDrive or MonoDrive controller.

SubDrive Duplex Alternator – Model number 5850012000		
Input (From Power Source)	Voltage	115 VAC
	Frequency	60 Hz
Pressure Setting*	Factory Preset	50 psi
	Adjustment Range	25-80 psi
Controller Size (approximate)	Outer Dimensions	5.8 x 5.8 x 3.6" (14.7 x 14.7 x 9.1 cm)
	Weight	1.3 lbs (0.59 kg)

\* Pressure sensors must be set at least 3 psi apart.



NEMA 4 Enclosure



**Franklin Electric**

400 East Spring Street, Bluffton, Indiana 46714  
Tel: 260.824.2900 • Fax: 260.824.2909  
www.franklin-electric.com

