



*Designed for the
Professional
Pump Installer*

FEATURES:

- **Easy installation**
- **Increases flow as demand increases**
- **Adjustable constant pressure**
- **Built-in diagnostics**
- **Automatic pump and motor protection**
- **Smart[®] Technology**



CONSTANT PRESSURE 4" SUBMERSIBLES



What is the Beta Flo Pro Pressure Series?

The Pro Pressure Series combines reliability and state-of-the-art technology that offers private water system owners a premium water system. The Pro Pressure Series maintains constant pressure by continually adjusting pump performance to meet water demand. This system also eliminates pressure cycling during long-running applications such as lawn sprinkling and geothermal heat pump operation. For a premium water system that covers a wide range of demand, look to the Beta Flo Pro Pressure Series.

Applications

Residential Water Systems

- Provides “city-like” water pressure
- Smaller tank saves space

Geothermal Systems

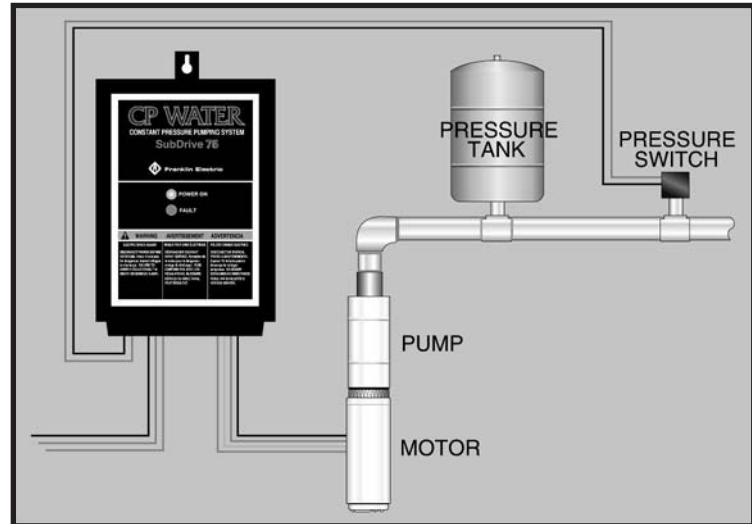
- Eliminates need for large buried tanks
- Eliminates pressure cycling

Lawn Irrigation Systems

- Even distribution of water in zones
- No need for separate system

Water Treatment Systems

- More efficient back flushing
- Multiple pumps no longer needed



The Beta Flo Pro Pressure Series utilizes National Max Pro Pump and Franklin Motor and CP water controller.

The Max Pro Series is our deluxe series with features that include:

- ▶ **Stainless steel suction / motor bracket**
- ▶ **Stainless steel discharge**
- ▶ **External stainless steel or lead free bronze check valve for added versatility**
- ▶ **Upthrust protection**
- ▶ **Noryl impellers & diffusers for high efficiency and higher abrasion resistance**
- ▶ **Stainless suction screen / cable guard**

SUBDRIVE 75 CONSTANT PRESSURE CONTROLLER

SubDrive 75 uses state-of-the-art electronics technology to provide constant water pressure through variable speed control of standard ¾ Hp 4" submersible water well pumps, adding significant value to residential water systems.

APPLICATION DATA

SubDrive 75 is designed for use with a ¾ Hp pump mounted to a 1 ½ Hp Franklin electric motor. This innovative variable speed controller is designed for applications with a wide range of flow demand, including large homes, ground source heat pumps, and sprinkler systems. SubDrive 75 is UL recognized for USA and Canada.

FEATURES & BENEFITS

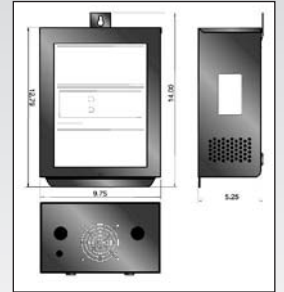
- ▶ Constant water pressure with a wide range of settings (25 to 80psi).
- ▶ Works with a standard pump mounted to a standard 3-phase Franklin Electric submersible motor.
 - 1 ½ Hp performance from a ¾ Hp pump
 - Proven Franklin Electric motor
 - State-of-the-art electronics with active power factor correction.
- ▶ Works with small pressure tanks or larger tanks already in place.
 - Minimum tank volume: 2 gallons
 - Water system fits into smaller spaces
- ▶ Water faucets can be installed between wellhead and controller.
- ▶ Excellent radio frequency interference shielding.
- ▶ Installation is as simple as a control box.
- ▶ Three-phase performance using single-phase input.
 - High starting torque
 - More efficient
 - Smooth running
- ▶ Soft start means less motor stress and longer motor life.
- ▶ Built-in diagnostics and protection.
 - Surge protection
 - Underload
 - Undervoltage
 - Locked pump
 - Open circuit
 - Short circuit
 - Overheated controller
- ▶ Smart Reset® technology allows well recovery before restarting the pump.

SPECIFICATIONS

Input (From Power Source)
 Voltage.....200 — 250V/Single Phase
 Frequency.....60/50 Hz
 Amps.....11 A
 Power Factor.....1 (constant)

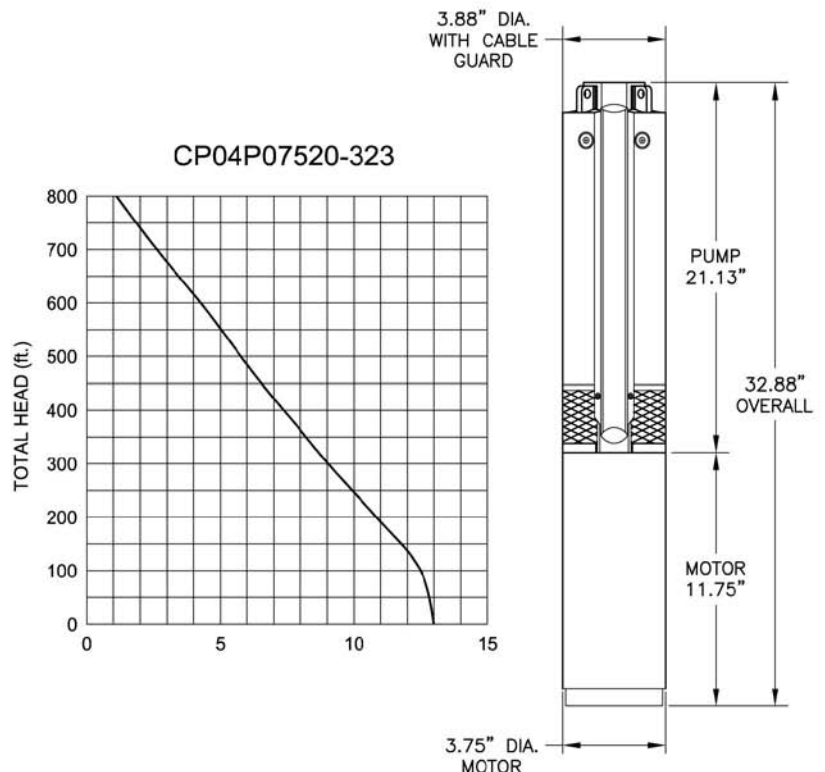
Output (To Motor)
 Voltage.....Variable V/Three Phase
 Frequency.....Variable (30-80 Hz)
 Amps.....5.9 A
 Enclosure.....NEMA 1 (indoor)
 Pressure Sensor (included).....External
 Controller Weight.....13.8 lbs/6.25 Kg
 Carton Size16.5" x 12" x 9"
 Shipping Weight17 lbs/7.7 Kg

For use with
 Pump Rating.....¾ Hp
 Motor Rating1 ½ Hp, 230 VAC, 3-Phase



SUBDRIVE 75

Depth to Water (Ft.)	GPM Pressure at Sensor (PSI)					Max. Shut-Off (PSI)
	30	40	50*	60	70	
20	13.0	12.3	12.0	11.4	11.1	375
40	12.3	12.0	11.4	11.1	10.9	
60	12.0	11.4	11.1	10.9	10.5	
80	11.8	11.3	11.0	10.5	10.2	
100	11.3	11.0	10.5	10.2	10.0	
120	11.1	10.9	10.3	10.0	9.5	
140	10.9	10.3	10.0	9.5	9.0	
160	10.3	10.0	9.5	9.0	8.7	
180	10.0	9.5	9.0	8.7	8.5	
200	9.5	9.0	8.7	8.4	8.0	
220	9.0	8.7	8.4	8.0	7.8	
240	8.8	8.5	8.0	7.8	7.4	
260	8.7	8.3	7.8	7.5	7.2	
280	8.4	7.9	7.6	7.2	6.7	
300	7.9	7.6	7.2	6.7	6.3	
350	7.2	6.7	6.3	5.9	5.7	
400	6.3	5.9	5.7	5.3	4.9	
450	5.7	5.3	4.9	4.7	4.3	
500	4.8	4.5	4.1	3.7	3.4	
550	3.9	3.6	3.1	2.8	2.5	
600	3.1	2.8	2.4	2.0	1.5	
650	2.5	2.0	1.7	1.3	1.0	
700	1.7	1.3	1.0	0.7		

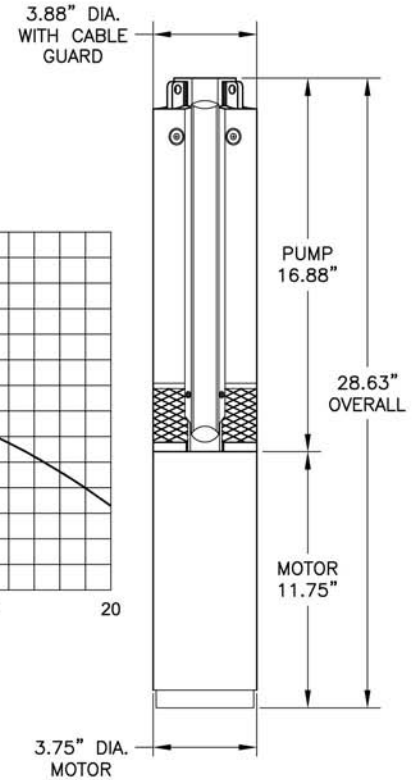
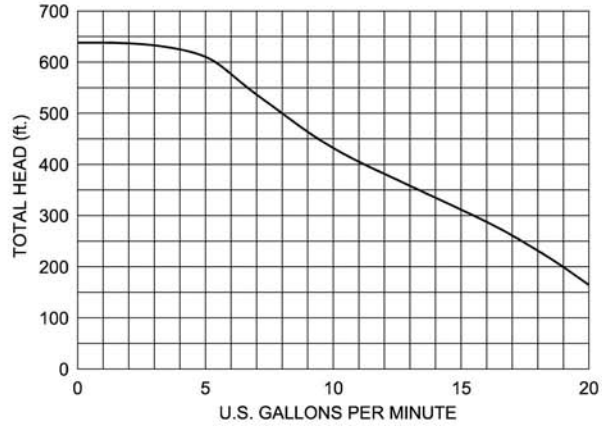




SUBDRIVE 75

Depth to Water (Ft.)	GPM Pressure at Sensor (PSI)					Max. Shut-Off (PSI)
	30	40	50*	60	70	
20	22.5	22.0	21.5	20.0	19.0	276
40	22.0	21.5	20.0	19.0	18.5	
60	21.5	20.0	19.5	18.8	18.2	
80	20.5	19.5	18.8	18.2	17.8	
100	19.5	18.8	18.2	17.8	17.0	
120	19.0	18.5	18.0	17.5	16.5	
140	18.5	18.0	17.5	16.5	15.5	
160	18.0	17.5	16.5	15.5	14.5	
180	17.5	16.5	15.5	14.5	13.5	
200	17.0	16.0	15.0	14.0	13.0	
220	16.0	15.0	14.0	13.0	12.0	
240	15.5	14.5	13.5	12.5	11.5	
260	14.5	13.5	12.5	11.5	10.5	
280	13.5	12.5	11.5	10.5	10.0	
300	12.5	11.5	10.5	10.0	9.0	
350	10.5	10.0	9.0	8.0	7.8	
400	9.0	8.0	7.8	7.5	6.5	
450	7.8	7.5	6.5	6.0	5.5	
500	6.0	5.5	4.5			
550	4.5					
600						
650						
700						

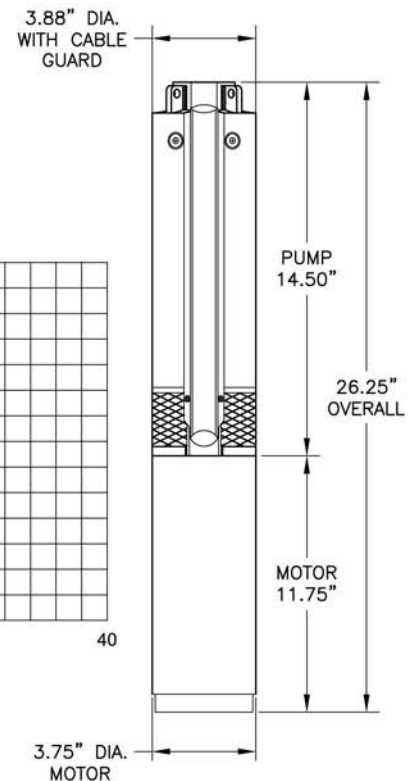
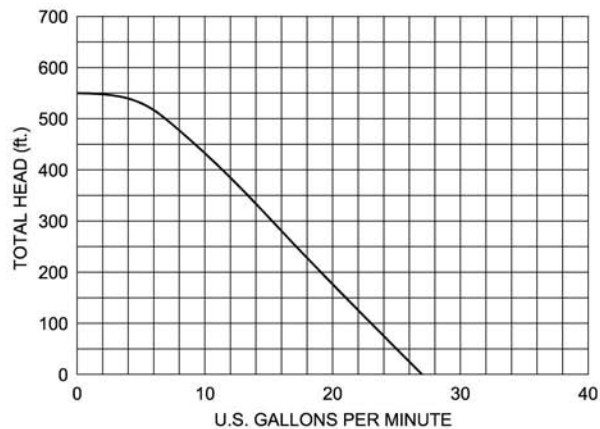
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SUBDRIVE 75

Depth to Water (Ft.)	GPM Pressure at Sensor (PSI)					Max. Shut-Off (PSI)
	30	40	50*	60	70	
20	25.2	23.0	22.5	22.0	20.0	237
40	23.5	22.5	22.0	21.0	19.5	
60	23.0	22.0	21.0	19.5	19.0	
80	22.0	21.0	19.5	19.0	18.0	
100	21.0	19.5	19.0	18.0	16.5	
120	20.0	19.0	18.5	17.0	16.0	
140	19.0	18.5	17.0	16.0	15.3	
160	18.5	17.0	16.0	15.3	14.0	
180	17.5	16.5	15.8	14.5	13.5	
200	16.5	15.8	14.5	14.0	13.2	
220	15.3	14.0	13.5	13.0	11.5	
240	15.0	13.8	13.2	12.0	11.0	
260	14.0	13.5	13.0	11.5	10.5	
280	13.5	13.0	11.5	10.5	9.5	
300	13.0	11.5	10.5	9.5	8.5	
350	10.5	9.5	8.5	8.0	7.0	
400	8.2	7.5	6.0			
450	7.0	5.3				
500						
550						
600						
650						
700						

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SUBDRIVE 150 CONSTANT PRESSURE CONTROLLER

The SubDrive 150 provides constant water pressure through variable speed control of a 1 ½ Hp 4" submersible water well pump end to produce the performance of a 3 Hp pump curve.

APPLICATION DATA

SubDrive 150 is designed for residential or light commercial applications with a 1 ½ Hp pump mounted to a 3 Hp Franklin Electric 3-phase motor. Using single-phase input, this innovative variable speed controller can be used to provide constant pressure in applications with a wide range of flow demand including large homes, ground source heat pumps, and sprinkler systems.

FEATURES & BENEFITS

- ▶ Constant water pressure with a wide range of settings (25 to 80psi).
- ▶ Installation is as simple as with a 3-wire control box.
- ▶ Works with a standard pump mounted to a standard 3-phase Franklin Electric submersible motor.
 - 3 Hp performance from a 1 ½ Hp pump
 - Proven Franklin Electric motor
 - State-of-the-art electronics with active power factor correction.
- ▶ Works with small pressure tanks or larger tanks already in place.
 - Minimum tank volume: 4 gallons
 - Water system fits into smaller spaces
- ▶ Excellent radio frequency interference shielding.
- ▶ Three-phase performance using single-phase input.
 - High starting torque
 - More efficient
 - Smooth running
- ▶ Soft start means less motor stress and longer motor life.
- ▶ Built-in diagnostics and protection.
 - Surge protection
 - Underload
 - Undervoltage
 - Locked pump
 - Open circuit
 - Short circuit
 - Overheated controller
- ▶ Smart Reset® technology allows well recovery before restarting the pump.
- ▶ UL recognized for USA and Canada.

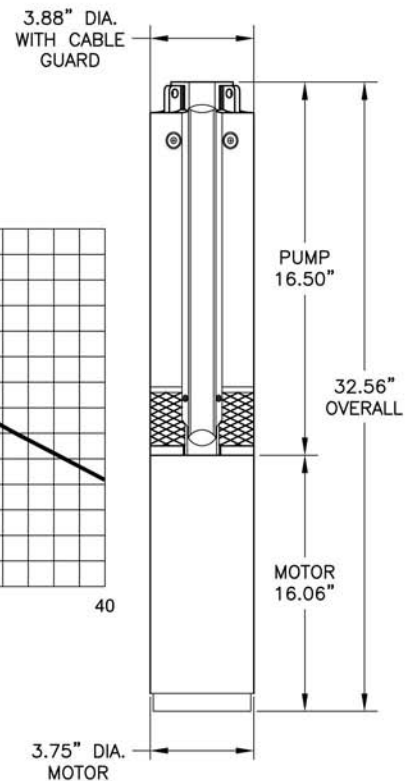
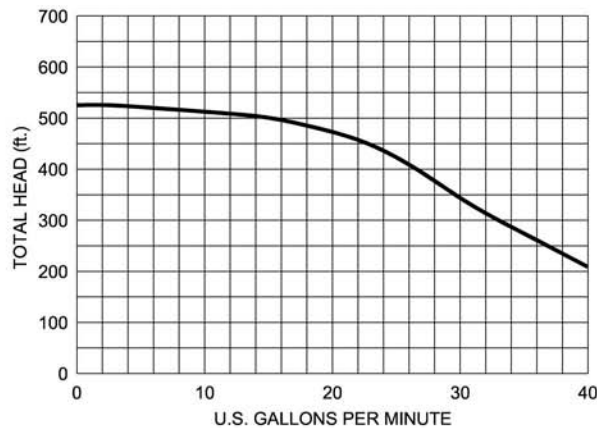
SPECIFICATIONS

- Input (From Power Source)
- Voltage.....190 — 260V/Single Phase
 - Frequency60/50 Hz
 - Amps23 A
 - Power Factor1 (constant)
- Output (To Motor)
- Voltage.....Variable V/Three Phase
 - Frequency.....Variable (30-80 Hz)
 - Amps10.9 A
- Enclosure.....NEMA 1 (indoor)
- Pressure Sensor (included).....External
- Controller Weight.....17 lbs/7.75 Kg
- Carton Size16.5" x 12" x 9"
- Shipping Weight20.25 lbs/9.2 Kg
- For use with
- Pump Rating1 ½ Hp
 - Motor Rating..... 3 Hp



SUBDRIVE 150

Depth to Water (Ft.)	GPM Pressure at Sensor (PSI)					Max. Shut-Off (PSI)
	30	40	50*	60	70	
20	47.0	46.5	45.5	44.0	42.5	219
40	46.5	45.5	44.0	42.5	41.0	210
60	45.5	44.0	42.5	41.0	39.0	201
80	44.0	42.5	41.0	39.0	38.0	193
100	42.5	41.0	39.0	38.0	36.0	184
120	41.5	40.0	38.0	37.0	35.0	175
140	40.0	38.3	37.0	35.5	33.8	167
160	38.3	37.0	35.5	33.8	32.5	158
180	37.0	35.5	33.8	32.5	30.7	149
200	35.5	33.8	32.5	30.7	28.9	141
220	34.0	33.0	31.0	30.0	28.0	132
240	33.5	32.5	30.5	29.0	27.5	123
260	33.0	32.0	30.0	28.0	27.0	115
280	30.7	28.9	27.5	25.9	24.3	106
300	28.9	27.5	25.9	24.3	22.6	97
320	27.5	25.9	24.3	22.6	18.0	89
340	25.9	24.3	22.6	18.0	12.0	80
360	24.3	22.6	18.0	12.0		71
380	23.0	20.0	16.0			63
400	22.0	16.0				54
420	15.7					45
440						
460						





SUBDRIVE 300 CONSTANT PRESSURE CONTROLLER

SubDrive 300 is the latest addition to the family of SubDrives. SubDrive 300 is a constant pressure controller designed for installations requiring 5 Hp performance at peak demand.

APPLICATION DATA

The single-phase input of the SubDrive 300 is designed for large applications where constant pressure is critical: commercial landscaping, small livestock operations, nurseries, and some large residential applications. Easy to install and NEMA 4 rated, it is suitable for indoor and outdoor installations.

SPECIFICATIONS

Input (From Power Source)

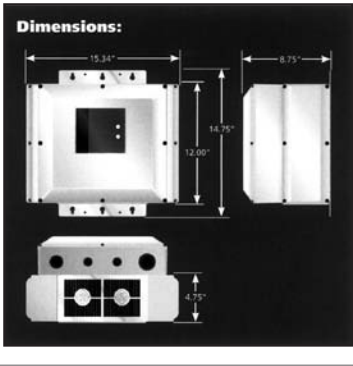
Voltage.....190 — 260V/Single Phase
 Frequency.....60/50 Hz
 Amps.....36 A
 Power Factor1 (constant)

Output (To Motor)

VoltageVariable V/Three Phase
 FrequencyVariable (30-80 Hz)
 Amps.....17.8 A
 EnclosureNEMA 4 (outdoor)
 Pressure Sensor (included).....External
 Controller Weight34 lbs/15.5 Kg
 Carton Size.....17.25" x 20" x 13.5"
 Shipping Weight.....38 lbs/17.3 Kg

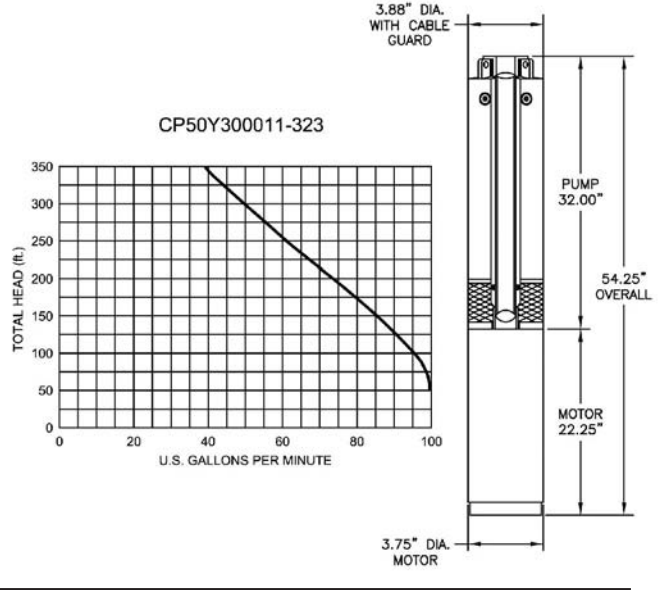
For use with

Pump Rating.....3 or 5 Hp (Selectable)
 Motor Rating 5 Hp (Three Phase)

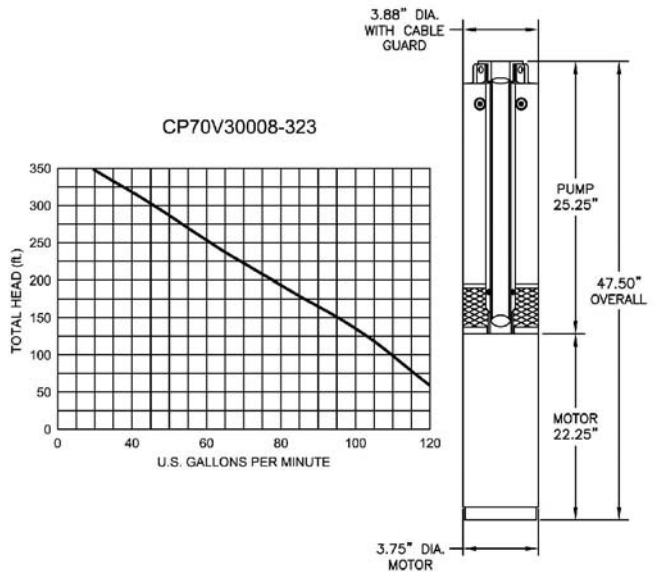


Depth to Water (Ft.)	GPM Pressure at Sensor (PSI)					Max. Shut-Off (PSI)
	30	40	50*	60	70	
20	95	93	91	85	78	203
40	93	91	85	78	73	194
60	91	85	78	73	67	186
80	88	81	75	70	64	177
100	81	75	70	64	59	168
120	78	73	67	61	57	160
140	73	67	61	57	51	151
160	67	61	57	51	46	143
180	61	57	51	46	41	134
200	57	51	46	41	36	125
220	54	48	44	38	34	117
240	48	44	38	34	29	108
260	46	41	36	32	26	99
280	41	36	32	26	20	90
300	36	32	26	20	10	82
320	32	26	20	10	-	73
340	26	20	10	-	-	64
360	-	-	-	-	-	56
380	-	-	-	-	-	47
400	-	-	-	-	-	39

SUBDRIVE 300



SUBDRIVE 300



Depth to Water (Ft.)	GPM Pressure at Sensor (PSI)					Max. Shut-Off (PSI)
	30	40	50*	60	70	
20	115	106	101	95	85	165
40	106	101	95	85	77	157
60	101	95	85	77	69	149
80	98	90	81	73	64	140
100	90	81	73	64	57	131
120	84	76	68	59	54	123
140	77	69	60	55	48	114
160	69	60	55	48	40	105
180	60	55	48	40	31	97
200	55	48	40	31	25	88
220	51	44	35	28	-	79
240	44	35	28	-	-	70
260	40	31	25	-	-	62
280	31	25	-	-	-	53
300	25	-	-	-	-	44

