RESIDENTIAL SEWAGE PUMP

MYERS® SRM4 SERIES

The Myers SRM4 series residential sewage pumps are considered by industry pros to be extremely reliable. The specially designed recessed impeller allows 2" solids to easily pass through without jamming. The cast iron housing and volute case handle the harshest conditions and will provide years of service. Automatic and manual operation models available.

APPLICATIONS

Sewage, high-capacity sump, effluent

SPECIFICATIONS

Capacities – 95 GPM (360 LPM)
Shut-off Head – 19' (5.8 m)
Solids Handling – 2" (50.8 mm)
Liquids Handling – Septic effluent and sewage
Intermittent Liquid Temperature – Up to 140°F (60°C)
Motor/Electrical Data – 4/10 HP, permanent split capacitor type, 115V, 12A, 1Ø, 60Hz; 230V, 6A, 1Ø, 60Hz
Acceptable pH Range – 5-9
Discharge, NPT – 2" (50.8 mm)
Housing – Heavy cast iron
Power Cord – 10' (20' optional)
Impeller – Recessed, thermoplastic
Volute Case – Cast iron
Shaft Seal – Type 11A, carbon and ceramic

FEATURES

Versatile Applications
Effective and efficient performance in septic tank sewage, effluent and high-capacity sump applications

Handles the Heat
High-endurance, oil-cooled motor for continuous bearing lubrication and critical heat dissipation

Powerful Torque
High-torque, permanent split capacitor (PSC) motor; no starting switches or relays to wear out

Motor Protection
Long-life carbon/ceramic seal provides extra protection against water leaks

Excess Heat Detection
Internal heat sensor provides overload protection; automatically resets when motor cools to a safe operating temperature

Free-flow Design
Recessed impeller design also improves the free flow of solids up to 2"

Longer Bearing Life
Recessed impeller reduces radial bearing loads, increasing bearing life

Automatic and Manual
Automatic tethered or vertical switch models (with piggyback plug), or manual operation models

PENTAIR

RESIDENTIAL SEWAGE PUMP

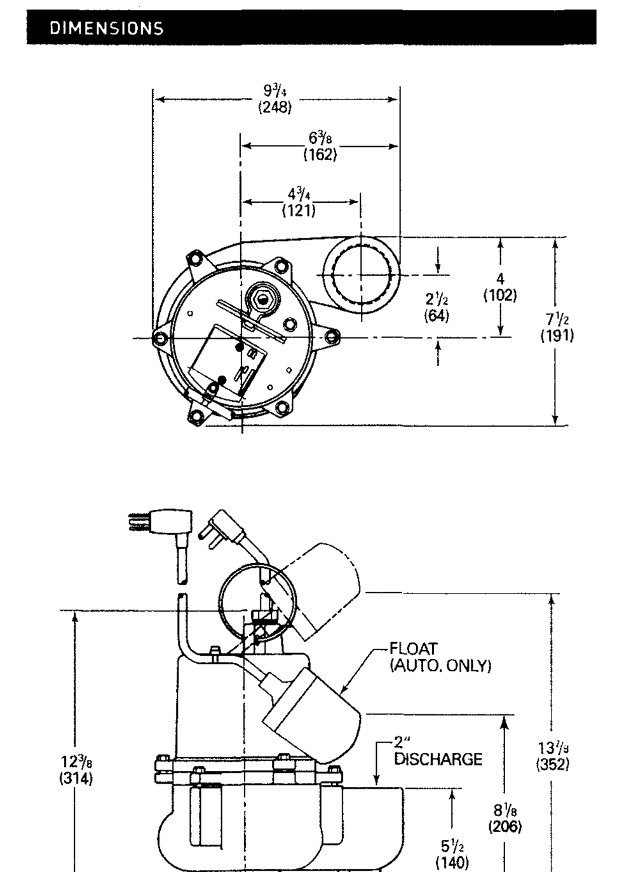
MYERS® SRM4 SERIES

ORDERING INFORMATION

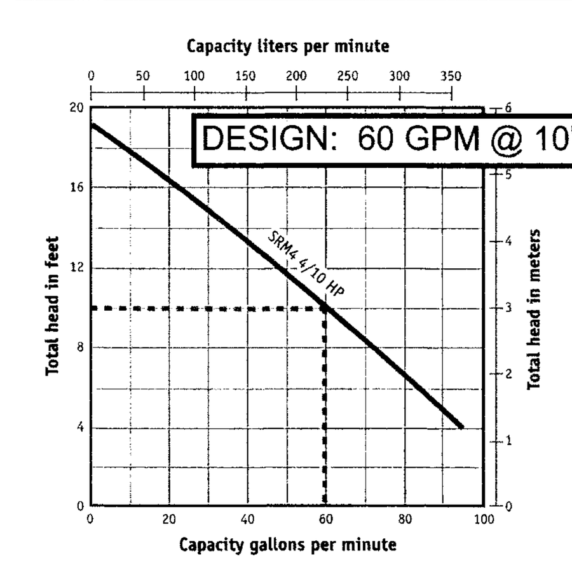
Catalog Number	HP	Volts	Phase/ Cycles	Amps	Discharge Size	Switch Type	Cord Length	Approx. Wt. Lbs.
SRM4P-1	4/10	115	1/60	12	2"	Tethered Automatic*	10'	40
SRM4PC-1	4/10	115	1/60	12	2"	Tethered Automatic*	20'	40
SRM4M1C	4/10	115	1/60	12	2"	Manual	20'	39
SRM4PC-2	4/10	230	1/60	6	2"	Tethered Automatic*	20'	40
SRM4M2C	4/10	230	1/60	6	2"	Manual	20'	39
SRM4V-1	4/10	115	1/60	12	2"	Vertical Automatic*	20'	40
SRM4V-2	4/10	230	1/60	6	2"	Vertical Automatic*	20'	40

*Piggyback

DIMENSIONS



PUMP PERFORMANCE



PENTAIR

RESIDENTIAL SEWAGE PUMP

MYERS® SRM4 SERIES

SPECIFICATIONS

Sewage Pumps – Pump(s) shall be Myers SRM4 series sewage pumps selected in accordance with the following design criteria:

Number of Pumps:	______
Primary Design Flow:	______
Primary Design Head:	______
Minimum Shut-off Head:	19
Motor Horsepower:	4/10
Motor Speed:	1650 RPM
Electrical:	115 Volts, 1Ø, 60 Hz or 230 Volts, 1Ø, 60 Hz

Pump – The pump shall be designed to handle raw sewage and be capable of passing 2 inch spherical solids. The pump shall be capable of handling liquids with temperatures to 140°F intermittent.

Motor – The pump motor shall be of the submersible type rated 4/10 hp at 1650 RPM and shall be for ______ 115 volts or ______230 volts single phase, 60 cycles. Stator winding shall be of the open type with Class A insulation rated for 105°C maximum operating temperature. The winding housing shall be filled with clean dielectric oil to lubricate bearings and seals, and transfer heat from the windings to the outer shell. The motor winding assembly shall be pressed into the stator housing for best alignment and heat transfer.

The motor shall be capable of operating over the full range of the performance curve without overloading the motor and causing any objectionable noise or vibration. The motor shall have two bearings to support the rotor; an upper sleeve bearing to accommodate radial loads and a lower sleeve bearing with thrust pad to take thrust and radial loads.

A heat sensor thermostat and overload shall be attached to the top end of the motor windings and shall be wired in series with the windings to stop the motor if the motor winding temperature reaches 221°F. The overload thermostat shall reset automatically when the motor cools to a safe operating temperature.

Power Cord – The motor power cord shall be ______10 or ______20 feet SJTW/SJTW-A type. The cord shall have a molded compression grommet to insulate electrical connections. The grommet shall thread into the motor housing to provide a positive seal and to prevent leaking of liquid into the motor housing. The sealing grommet shall provide strain relief for the power cord assembly.

Optional Control Switch – The sewage pump shall be controlled by an optional piggyback float switch. The float switch shall be of a non-mercury type and be capable of directly controlling the pump motor without the need for an external control panel.

Shaft Seal – The motor shall be protected by a rotating mechanical shaft seal. The seals shall have carbon and ceramic seal faces lapped to a tolerance of one light band. Metal parts and springs for seals shall be stainless steel.

Pump Impeller – The pump impeller shall be of the non-clog type. The impeller shall be constructed of engineered thermoplastic.

Motor Castings – The motor housing castings shall be of high tensile strength Class 30 gray cast iron. Castings shall be treated with phosphate and chromate rinse and painted with a high quality air dry alkyd enamel for corrosion protection.

Pump Case – The pump case shall be a high efficiency volute design capable of passing 2 inch spherical solids. The pump volute shall be constructed of Class 30 gray cast iron.

Fasteners – All exposed fasteners shall be of stainless steel.

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RESIDENTIAL SEWAGE PUMP

MYERS® SRM4 SERIES

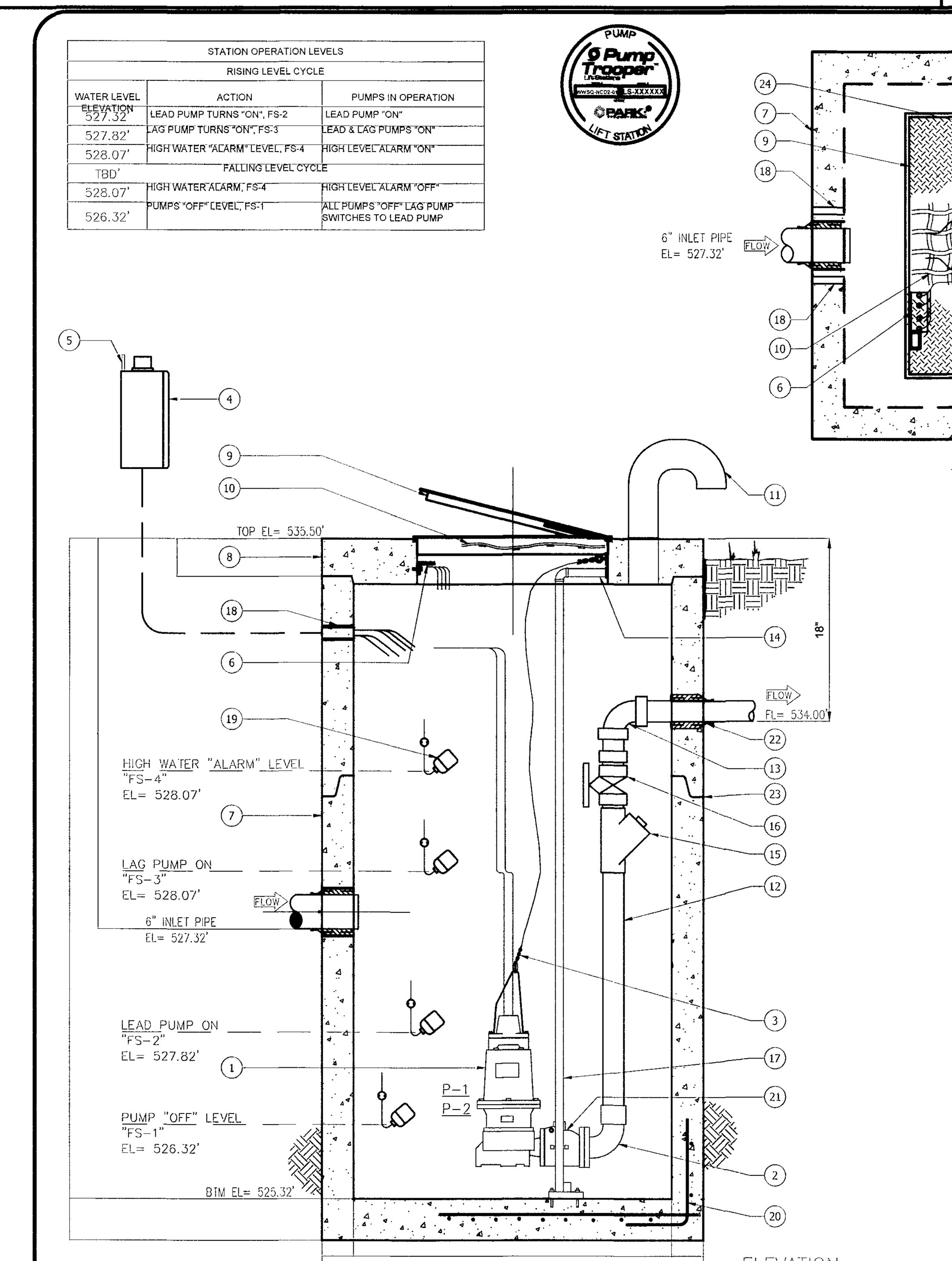
PENTAIR

USA
293 WRIGHT STREET, DELAVAN, WI 53115 WWW.FEMYERS.COM
PH: 888-987-8677 ORDERS FAX: 800-426-9446

CANADA
490 PINEBUSH ROAD, UNIT 4, CAMBRIDGE, ONTARIO N1T 0A5
PH: 800-363-7867 ORDERS FAX: 888-606-5484

Because we are continuously improving our products and services, Pentair reserves the right to change specifications without prior notice.

M9029SSE (04/30/14)



NOTE:
ALL DASHED PIPING TO BE FURNISHED BY CONTRACTOR

NOTE:
VERIFY ALL ELEVATIONS PRIOR TO FABRICATION

NOTE:
VERIFY ALL INLET/OUTLET ORIENTATIONS PRIOR TO FABRICATION

KEYED NOTES		
MARK	QTY	DESCRIPTION
1	2	2" SUBMERSIBLE PUMP
2	2	2" BASE ELBOW
3	2	STAINLESS STEEL CHAINS
4	1	DUPLEX CONTROL PANEL NEMA 4X FRP (MOUNTED BY CONTRACTOR)
5	1	RAINBIRD SENSOR
6	1	SS CABLE BRACKET
7	1	3'-0"x3'-0" SQUARE x 10'-2" DEEP CONCRETE WET WELL
8	1	8" THK FLAT CONCRETE TOP
9	1	24"x24" SINGLE LEAF ALUMINUM HATCHWAY
10	1	SAFETY NET
11	1	4" GALVANIZED VENT
12	2	2" SCH 80 PVC DISCHARGE PIPE
13	2	....
14	2	SS UPPER GUIDE BRACKETS
15	2	2" PVC BALL CHECK VALVE
16	2	2" PVC BALL VALVE w/ UNIONS
17	4	SS GUIDE RAILS
18	2	3" ELECTRICAL COUPLING
19	4	FLOAT SWITCH
20	-	REBAR AS REQ'D
21	2	LIFT-OUT ASSEMBLY
22	2	RESILIENT RUBBER BOOT
23	-	ALL JOINTS MADE WATER-TIGHT w/ PLASTIC FLEXIBLE GASKET (RAM-NEK)
24	1	NAMEPLATE INDICATING: MFG: PARKUSA 888-611-PARK WWW.PARK-USA.COM MODEL: WW36SQ-NCD2-060-11-.5-120 DATE MANUFACTURED
25	-	NOT USED

MODEL NUMBER: ParkUSA
888-611-PARK,www.PARKUSA.com
WW36SQ-NCD2-060-11-.5-120

WET WELL SIZE (ID)
48 - 48" DIA
60 - 60" DIA
72 - 72" DIA
96 - 96" DIA

PUMP CONFIGURATION
S - SIMPLEX
D - DUPLEX

PUMP DISCHARGE SIZE
3 - 3"
4 - 4"
6 - 6"
8 - 8"

FOW RATE CAPACITY (GPM)
100 - 100GPM
200 200 GPM
ETC...

POWER CHARACTERISTICS
43 - 460V/3PH/60Hz
23 - 230V/3PH/60hz
21 - 230V/1PH/60Hz
03 - 208V/3PH/60Hz
01 - 208V/1PH/60Hz

NON-CLOG PUMP SIZE

PUMP HEAD CAPACITY (TDH)

SPECIFICATIONS

CONCRETE:
CLASS I/II CONCRETE WITH DESIGN STRENGTH OF 4500 PSI AT 28 DAYS. UNIT IS OF MONOLITHIC CONSTRUCTION AT FLOOR, FIRST STAGE OF WALL AND BAFFLE WITH SECTIONAL RISER TO REQUIRED DEPTH.

REINFORCEMENT:
GRADE 60 REINFORCED WITH STEEL REBAR CONFORMING TO ASTM A615 ON REQUIRED CENTERS OR EQUAL.

ALUMINUM HATCH:
300 PSF RATED, 1/4" ALUMINUM SKID-RESISTANT FLOOR PLATE, STAINLESS STEEL TAMPERPROOF BOLTING & HINGES & SLAMLOCK. (H-20 RATING OPTIONAL)

PUMPS:
PUMPS SHALL BE CENTRIFUGAL TYPE WITH INTEGRAL NON-CLOG UNIT AND SUBMERSIBLE TYPE MOTOR. PUMPS SHALL HAVE A CAPACITY AS FOLLOWS:

PUMP No.	TYPE	GPM	TDH	RPM	ELECTRICAL	V	PH	Hz	HP
P-1	NON CLOG	60	11'	3450	½	120	1	60	
P-2	NON CLOG	60	11'	3450	½	120	1	60	

PUMPS RUN ONE AT A TIME.

CONTROLS:
PUMP CONTROLS SHALL BE MOUNTED INSIDE A UL LISTED NEMA-4X ENCLOSURE AND INCLUDE CIRCUIT BREAKERS, ALARM CIRCUIT FUSE, IEC RATED MOTOR STARTER, PUMP HOA, AND ALTERNATOR RELAY. PANEL SHALL HAVE A VISUAL ALARM BEACON. PANEL IS DESIGNED FOR REMOTE MOUNTING.

ENGINEERING DATA

FIELD EXCAVATION AND PREPARATION SHALL BE COMPLETED PRIOR TO DELIVERY OF ASSEMBLY. USE DIMENSIONAL DATA AS SHOWN. ALL PIPE, VALVES AND FITTINGS OF THE ASSEMBLY ARE APPROVED BY ONE OF THE FOLLOWING ASSOCIATIONS:

CERTIFIED PLANT B64.5 UL AMERICAN SOCIETY OF SANITARY ENGINEERING

A	6/24/19	RF	ORIGINAL DRAWING
REV	DATE	BY	DESCRIPTION

PROJECT: SOUTH LAMAR APT
CUSTOMER:
ENGINEER: BIG RED DOG S/N #
ORDER # PROJ #
DATE: 6/24/19 LOCATION: AUSTIN, TX

PARK USA
www.parkusa.com 888-611-PARK
STORM SEWER LIFT STATION
SUBMERSIBLE NON-CLOG PUMP STATION

PM	PC	DRN	ENG	DWG. NO.	REV.
MC	.	RF	.	WWSQ-NCD2-01	A

DATE 6/19

Hunter®

Mini-Clik Rain Sensors
Installation Instructions

INTRODUCTION

In most installations, the Mini-Clik acts as a switch to break the circuit to the solenoid valves of the irrigation system when it has rained. This allows the timer to advance as scheduled, but keeps the valves from opening the water flow. Once the Mini-Clik has dried sufficiently, the switch closes again to allow for normal operation.

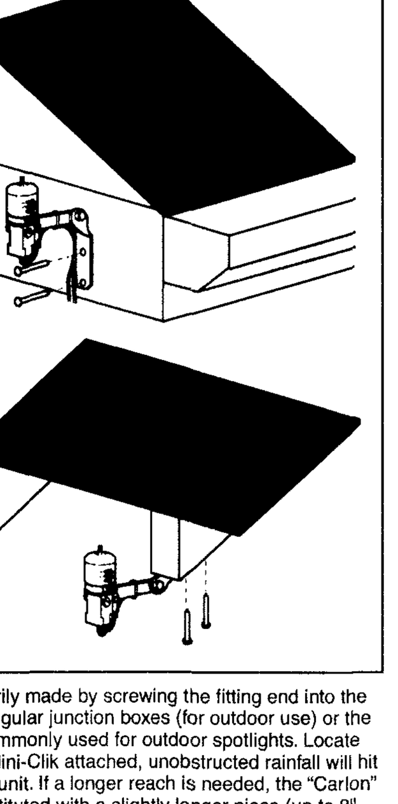
The Mini-Clik has three blue wires coming out of it. Two are connected to a 25 foot extension, and the third center one is left disconnected. This center blue wire is the "normally open" lead of the switch and is ***not*** used in most installations. The remaining two extension wires are colored (one "silver" tinned, the other natural copper); however, in the following instructions it will *not* matter which wire is connected at a given junction.

For the Model Mini-Clik-C: This rain sensor unit is the same as the standard model except for the lack of an aluminum mounting bracket and the addition of a ½" threaded cap, which allows for the easy use of electrical conduit to totally enclose the wires. Unless local code states otherwise, plumbing grade PVC pipe can be used as well as electrical grade conduit.

For the Model Mini-Clik-HV: This rain sensor unit is designed to be used with automatic irrigation systems of two principle designs: 1) single-station electrical timer (e.g., Intermatic) that switches power to a pump, either directly or through a relay; or 2) single-station electrical timer that switches power to a solenoid valve.

MOUNTING

Standard Model:
Using the screws provided, mount the Mini-Clik on any surface where it will be exposed to unobstructed rainfall, but not in the path of sprinkler spray. The switch-housing portion must be upright (as pictured), but the swivel-bracket can be moved for mounting on any angled surface. Loosen the locknut and screw before swiveling bracket, and then re-tighten.



For the Conduit Model Mini-Clik-C:
The conduit acts as the mounting support for the unit. Therefore, place and mount the conduit to allow for the desired sensor location as described in the main instructions for the standard model. Be sure to support the conduit sufficiently along its various lengths.

For the High-Voltage Model Mini-Clik-HV:
The mounting of this unit is primarily made by screwing the fitting end into the threaded holes of covers to rectangular junction boxes (for outdoor use) or the covers of round junction boxes commonly used for outdoor spotlights. Locate the junction box so that with the Mini-Clik attached, unobstructed rainfall will hit the outermost sensing end of the unit. If a longer reach is needed, the "Carlon" flexible conduit piece can be substituted with a slightly longer piece (up to 8" length with no support or up to 11" with support).

Helpful hints for mounting:
A. When looking for a suitable location such as on the side of a building or post, the closer the Mini-Clik is to the controller, the shorter the wire run will be. This will also minimize the chance for wire breaks.
B. The ideal location for mounting is not always the most practical location. In the case where a compromise must exist (such as low location on a side wall rather than the preferred high location), note that the Mini-Clik will still work as it will always receive some rainfall – it just will not be as accurate in its gauging as it could be.

C. As described in the "Operation" section of this manual, "reset rate" refers to the amount of time it takes the Mini-Clik to dry out sufficiently for the sprinkler system to be allowed to come back on. The mounting location will affect this rate and should be taken into consideration should extreme conditions exist. For example, mounting the Mini-Clik on a very sunny, southern end of a building may cause the Mini-Clik to dry out sooner than desired. Similarly, mounting on the northern end of a building with constant shade may keep the Mini-Clik from drying soon enough.

Once the Mini-Clik is mounted, run the wire to the controller, and fasten it every few feet with wire clips or stapled for best results. If an extension to the wire provided is needed, use the following table to determine the minimum wire gauge needed:

If the extension needed is:	25-50 ft.	50-100 ft.	100 ft. or more
use:	20 AWG	18 AWG	16 AWG

WIRING TO YOUR IRRIGATION SYSTEM

Important: The Standard Model Mini-Clik is sold and designed for hook up to 24 Volt irrigation controllers only. For wiring to 110V or 220V irrigation controllers, please consult your distributor or this factory. All wiring must conform to National Electrical Code or applicable local codes.

For the Model Mini-Clik-C: WARNING! This unit is designed to be installed in conjunction with 24VAC circuits only. Do not use with 110 or 220VAC circuits.

For the Model Mini-Clik-HV: WARNING! This unit must be installed by a qualified electrician in accordance with National Electrical Code and applicable local codes. The electrical rating of this device is 125-250VAC at 10.1 amps. Do not let current pass through this device that exceeds this rating. Do not install directly in line with any pump.

Wiring to the Hunter SRC
The Mini-Clik connects directly to the SRC. This allows you to easily override the sensor by using the RUN (BYPASS SENSOR) position on the dial.

1. Route the wires from the Mini-Clik up through the same opening used for valve wiring.
2. Connect one wire to the RS terminal and other to the C terminal (See Figure 1).
3. Connect the valve common to the RS terminal.

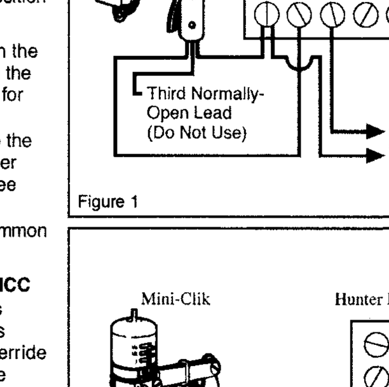


Figure 1

Wiring to the Hunter ICC
The Mini-Clik connects directly to the ICC. This allows you to easily override the sensor by using the Sensor switch on the front panel.

1. Remove the jumper from the two "SEN" terminals.
2. Route the wires from the rain sensor up through the same conduit opening used for valve wiring.
3. Connect one wire to the terminal labeled "SEN" and the other wire to the other "SEN" terminal (See Figure 2).

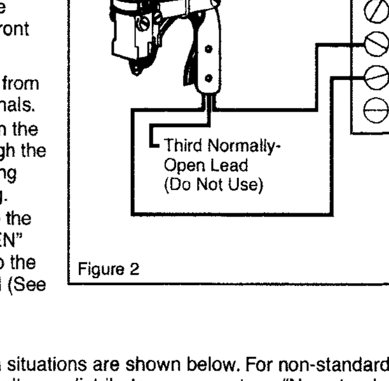


Figure 2

Other Controllers
The two most common situations are shown below. For non-standard wiring situations, please consult your distributor or request our "Non-standard" wiring information packet.

A. 24 Volt Solenoid Valves Only (No booster pump) (See Figure 3)

With the two wires from the Mini-Clik at the controller, locate the "common ground" wire of the solenoid valves. If it is connected to the common terminal on the controller, disconnect it. Attach one wire of the Mini-Clik to the "common" terminal (usually marked "C") on the controller. Attach the other wire of the Mini-Clik to the common wire leading to the valves. *Note: The common wire to the valves does* ***not*** *have to be interrupted at the controller. The Mini-Clik may be wired anywhere along the common wire line.*

B. 24 Volt Solenoid Valves with Booster Pump (See Figure 4)

Locate the common wire to the solenoid valves and the common wire leading to the coil of the relay that starts the pump. If these two wires are connected to the "common" terminal on the controller, disconnect both of them.

Twist together these two wires along with one wire from the Mini-Clik, and secure with a wire nut. Attach the other wire of the Mini-Clik to the "common" terminal on the controller. *Note: The pump circuit output* ***must*** *be 24 Volts in this situation. Do not proceed if 110V.*

C. Special Instructions for Mini-Clik-HV (See Figures 5 and 6)

The two taped and stripped wires are the ones to be used when following these accompanying diagrams. The third wire should be terminated with a wire nut (not supplied). All wire connections with the Mini-Clik should be made with wire nuts and located in a junction box.

Where the timer is controlling a pump, the relay may be inside the timer, external or non-existent. *If there is no relay in the circuit, one must be added.* The wiring for an internal or external relay is the same: the Mini-Clik breaks the circuit to the coil of the relay only. Either wire of the coil may be broken.

Operation Check to Verify Correct Wiring
Turn on one zone of the irrigation system that is visible while you are in reach of the Mini-Clik. Manually

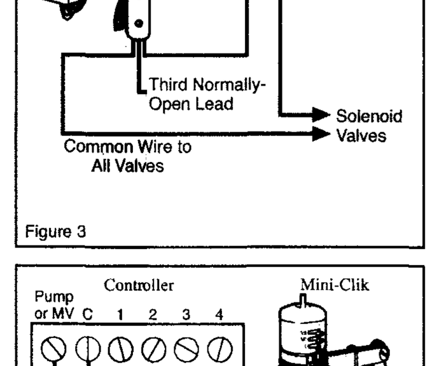


Figure 3

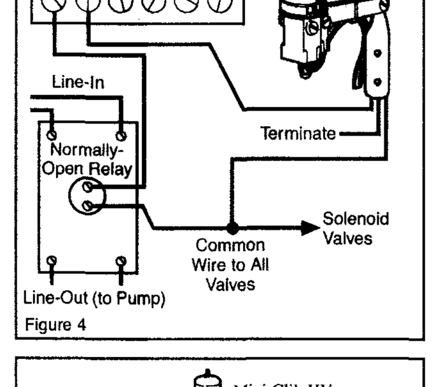


Figure 4

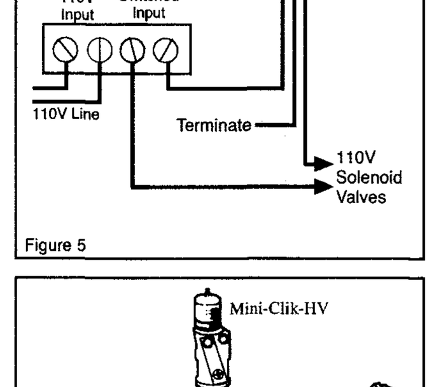


Figure 5

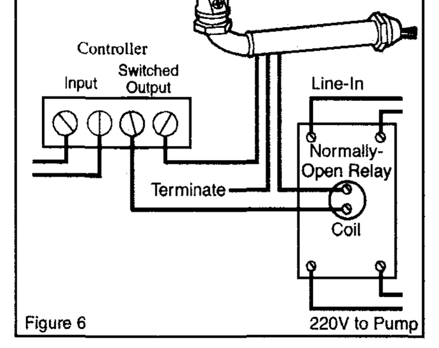
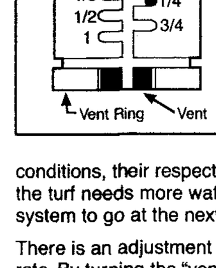


Figure 6

depress the spindle at the top of the Mini-Clik until you hear the switch "click" off. The sprinkler zone should stop instantaneously. If it does not, check wiring for correctness. It is not necessary to "wet" test the Mini-Clik, although it will test the operation fine, if desired.

ADJUSTMENTS AND OPERATION



The Mini-Clik can keep the irrigation system from starting or continuing after rainfall quantities of ⅛", ¼", ½", ¾" or 1". To adjust it to the desired shut-off quantity, rotate the cap on the switch housing so that the pins are located in the proper slots (see Figure 7). Do not forcibly twist the cap as this might break the pins.

The time that it takes the Mini-Clik to reset for normal sprinkler operation after the rain has stopped is determined by weather conditions (wind, sunlight, humidity, etc.) These conditions will determine how fast the hygroscopic discs dry out, and since the turf is also experiencing the same conditions, their respective drying rates will roughly parallel each other. So when the turf needs more water, the Mini-Clik is already reset to allow the sprinkler system to go at the next scheduled cycle.

There is an adjustment capability on the Mini-Clik that will slow down the reset rate. By turning the "vent ring" (see Figure 7) to completely or partially cover the ventilation holes, the hygroscopic discs will dry more slowly. This adjustment can compensate for an "overly sunny" installation location, or peculiar soil conditions. Experience will best determine the ideal vent setting.

BYPASSING THE SENSOR

The Hunter ICC and SRC controllers are equipped with a built-in bypass that allows you to override an active sensor. For controllers not equipped with this feature, should you desire to bypass the operation of the Mini-Clik for any reason (i.e., turn on your system even though the Mini-Clik has shut "off" due to rainfall), there are two simple ways to do this. The first is to add our Bypass Switch Box. This mounts on or next to the controller, and by simply moving the switch, the Mini-Clik is bypassed. The second method is to go to the Mini-Clik and raise the "cap" a couple of settings higher or completely remove it. This takes the pressure off the switch button, which allows the valve circuit to close again.

Note: Using the "manual" switch on non-Hunter controllers typically will ***not*** *bypass the sensor.*

MAINTENANCE

There is no required maintenance for the unit. The Mini-Clik does not have to be removed or covered for "winterizing" purposes.

Troubleshooting
Follow these simple checks first before assuming the unit is bad and replacing it.

System will not come on at all:
A. First, check to see that the Mini-Clik discs are dry and the switch "clicks" on and off freely by pressing the top of the spindle.
B. Next, look for breaks in the wire leading to the Mini-Clik and check all wire junctions.
C. Finally, if the Mini-Clik is dry and the wire leading to it is good, check the Mini-Clik switch by nicking the insulation of the two "outer" wires near the unit to expose copper. Turn one sprinkler zone on, and apply a "jumper wire" across the two exposed wires. If the sprinkler now comes on, the switch is bad. Wrap all nicked wires with electrical tape.

System will not shut off even after heavy rainfall:
A. Check wiring for correctness (see "Operation Check to Verify Correct Wiring").
B. Check sensitivity setting on Mini-Clik – move cap to more sensitive setting. The Mini-Clik is an accurate rain gauge and can be verified by setting up a "tube" type rain gauge in the same vicinity and making periodic readings.
C. Is the rainfall actually hitting the Mini-Clik? Check for obstructions to rainfall such as overhangs, trees or walls.

All Mini-Clik models are listed by Underwriters Laboratories, Inc. (UL). Samples of these devices have been evaluated by UL and meet the applicable UL standards for safety.

Hunter Industries Incorporated • The Irrigation Innovators
1940 Diamond Street • San Marcos, California 92078 • U.S.A. • TEL: (1) 760-744-5240 • FAX (1) 760-744-7461
www.hunterindustries.com

LIT-315 RevA 5/11

SITE PLAN APPROVAL Sheet 37 of 87
FILE NUMBER SP-2018-0296C APPLICATION DATE JULY 2, 2018
APPROVED BY COMMISSION ON N/A UNDER SECTION 112 OF
CHAPTER 25-5 OF THE CITY OF AUSTIN CODE.
EXPIRATION DATE (25-5-81, LDC) 12/6/22 CASE MANAGER ROSEMARY AVILA

Director, Development Services Department
RELEASED FOR GENERAL COMPLIANCE: 12/6/19 ZONING CS-V
Rev. 1 ______ Correction 1 ______
Rev. 2 ______ Correction 2 ______
Rev. 3 ______ Correction 3 ______
Final plat must be recorded by the Project Expiration Date, if applicable. Subsequent Site Plans which do not comply with the Code current at the time of filing, and all required Building Permits and/or a notice of construction (if a building permit is not required), must also be approved prior to the Project Expiration Date.

NO.	DATE	REVISION	BY

BIG RED DOG
a division of WGI
ENGINEERING | CONSULTING
2021 E. 5TH ST. #200
AUSTIN, TEXAS 78702
512.669.5560
WWW.BIGREDDOG.COM
TEXAS REG. NO. F-15085

STATE OF TEXAS
VITO M. TRUPIANO
119592
LICENSED PROFESSIONAL ENGINEER

AUSTIN SOUTH LAMAR APARTMENTS
1515 SOUTH LAMAR
AUSTIN, TRAVIS COUNTY, TEXAS

STORM WATER LIFT STATION

SHEET
CG506
37 OF 87
SP-2018-0296C