



# Electric Submersible Pumps

Multiquip General Construction Equipment Division



## Centrifugal and Trash Models



Centrifugal Submersibles

Trash Submersibles

# Multiquip Submersible Pumps

*Bolt-on discharge port allows easy replacement*

*Cast aluminum housing for light weight*

*Electric motor — water is discharged around the casing for cool operation*

*Safety First — Selected models carry the UL listing to protect your customers and your business.*

*Cast iron volute and impeller withstand tough dewatering projects*

*Strain relief cord protection*

*Thermal overload protection prevents motor damage*

*Compact, streamlined design*

*Cast iron/steel motor casing serves as heat conductor*

*Oil-filled seal provides lubrication when running dry*

*Stainless steel strainer and hardware eliminates corrosion*

ST-2005CUL2  
2" — 115V  
85 GPM

## Versatile pumps that handle a wide range of applications:

**Construction** — Contractors prefer the rugged design of Multiquip pumps for removing water from well casings, construction sites, cofferdams and excavations. All pump components are designed to withstand the rigors of the job site.

**Utilities** — The pump of choice when dewatering manholes or transformer vaults. Service personnel value their lightweight and portability.

**Municipalities** — The versatility and reliability of Multiquip pumps makes them popular with state and local governments. Street and sanitation departments depend on our pumps for the removal of unwanted water.

**Homeowners** — Multiquip's lightweight, compact submersible pumps are the first choice for household dewatering applications such as basements and swimming pools.

**M**ultiquip Electric Submersible Pumps are ideal for removing water from confined areas. Their compact design and high performance enables them to get the job done where other pumps come up short. Submersible pumps provide several advantages over engine-driven pumps.

- Models available in sizes ranging from 1½" to 6"
- High pumping capacities — up to 47,400 GPH — with heads up to 138 feet.
- Single and three phase motor configurations are available to meet virtually any power requirement.

# Full-Featured Submersibles

## Quiet, Unattended Operation

When you have a deadline to meet, you can't afford to have your pump stop working when your crew is done for the day. Multiquip submersibles are powered by electric motors and can be left running for hours.

## Versatility

Submersibles can operate completely or partially submerged in any position. Unlike engine driven pumps, they require no priming assistance and may be used indoors.

## Maintenance

Since these pumps are driven by electric motors there are no concerns regarding fuel or engine oil. All wear parts are constructed of abrasion resistant material to reduce costly downtime for repairs.

## Impellers

Impellers are made of high-chrome ductile iron to minimize wear and prolong service life. Model S-500UL is equipped with a special rubber impeller that lasts up to sixteen times longer than other types.



## Mechanical Seal

The mechanical seal of each pump operates within an oil-filled chamber that provides positive lubrication. This helps prevent damage in the event the pump is run dry for short periods of time.

## "Puddle Sucker"

While many applications require the removal of as much water as possible, most submersible pumps can leave as much as 1" to 2" of water. This can be very impractical when faced with a large surface area such as a basement floor. Multiquip's S-500P "Puddle Sucker" has the ability to draw water down to a level of 1/16" or lower without having to place the pump in any type of sump.



## Motor Protection

Single-phase models have built-in thermal overload protection that shuts down the pump when the operating temperature becomes too high. The motor automatically restarts once the temperature returns to an acceptable level. Three-phase models require a control box which offers thermal overload protection.

## Hardware

All hardware is made of stainless steel to resist corrosion and simplify service.

## Quality and Safety

Multiquip submersible pumps are certified in accordance with ISO9001. This internationally recognized standard for quality assurance covers all aspects of the manufacturing process. Additionally, selected models carry the Underwriters Laboratories (UL) listing for compliance with both U.S. or Canadian electrical safety codes.



## Pump Controls

Control boxes and float switches are available for all submersible pump models. These accessories enable the operator to either manually or automatically control pump operation. *Features vary by model.*



## Hoses

A full line of discharge hoses with standard and quick-disconnect fittings are available to suit your application.



S-500UL  
2" — 115V  
63 GPM

S-500P  
2" — 115V  
61 GPM

ST-1503CUL  
1 1/2" — 115V  
45 GPM

ST-2005CUL2  
2" — 115V  
85 GPM

ST-2010CUL  
2" — 115V  
95 GPM

ST-2010B  
2" — 230V  
95 GPM

# Accessories

## Float Switches

### SW-1 Single Float Switch

■ UL and CSA listed ■ Pumping level range 5.5" to 18" ■ 20 foot, 14 gauge electrical cord (with piggyback plug) ■ For use with 115V models up to ½ HP. (See Figure 1)

### SW-1WOP Single Float Switch

■ UL and CSA listed ■ 20 foot, 14 gauge electrical cord, bare wire on end (no plug) ■ Use with control box applications (direct connection to control box).

### SW-2 Dual Float Switch

■ UL and CSA listed ■ Pumping level range 1" to 48" ■ 15 foot, 14 gauge electrical cord (with piggyback plug) ■ For use with 115V models up to 1-HP. (See Figure 2)

## Single-Phase Control Boxes

(includes two SW-1WOP Float Switches)

### CB-3 Single Phase Control Box

■ Water-resistant fiberglass housing ■ Running light ■ Use with any 115V model submersible pump.

### CB-5 Single Phase Control Box

■ Water-resistant fiberglass housing ■ Starting capacitors, relay, transformer, and overload protection ■ Use with model ST-2020B-1.

### CB-6 Single Phase Control Box

■ Water-resistant fiberglass housing ■ Relay, transformer, and overload protection ■ Use with model ST-2020BD and ST-3020BCUL.

## Three-Phase Control Boxes

### Full-featured Control Boxes (CB-series) (float switches optional)

■ CUL listed (UL for the USA and Canada) ■ Electronic overload guard helps prevent short circuits, single phasing, and power spikes. The overload guards have adjustable amperage settings ■ Watertight housing and cable glands prevent water from leaking into the box; an extra gland is provided in case float switches are used with the box ■ Operation switch and running lights are located on the front of the panel ■ Designed to accept float switches for automatic operation.

Model **CB-101** for ST-2020BD (230V applications only)

Model **CB-102** for ST-2020BD (430V applications only)

Model **CB-200** for ST-3050D (230 or 430V applications) and ST-3020BCUL (230V 1Ø)

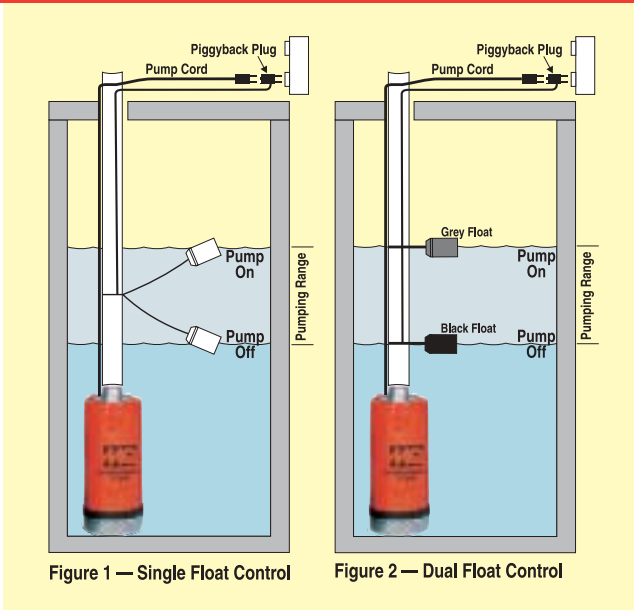


Figure 1 — Single Float Control

Figure 2 — Dual Float Control

### Basic Control Boxes (MCP-series) (to be used without float switches)

■ Motor circuit protector, protects against short-circuits, single phasing, and power spikes ■ Adjustable amperage range ■ UL listed watertight fiberglass enclosure ■ Use where float switches are not required.

Model **MCP101** for ST-2010B, ST-2020BD (230V only)

Model **MCP102** for ST-2020BCUL, ST-3050D (230V only)

Model **MCP103** for ST-2020BD (460V only)

Model **MCP104** for ST-3050D (460V only)

### 4" and 6" 3-Phase Sub Pump Control Boxes (float switches optional)

■ Water-resistant fiberglass housing ■ Magnetic starter, relay, transformer, and overload protection ■ Designed to accept float switches for automatic operation.

Model **CB-12** for ST-4102, ST-6152 (230V only)

Model **CB-14** for ST-4101, ST-6154 (460V only)



ST-2020BD  
2" — 230/460V  
145 GPM

ST-3020BCUL  
3" — 230V  
170 GPM

ST-3050D  
3" — 230/460V  
270 GPM

ST-4102/-4104  
4" — 230V or 460V  
371 GPM

ST-6152/-6154  
6" — 230V or 460V  
790 GPM

# Multiquip Submersible Trash Pumps

**H**eavily debris-laden water calls for rugged pumps. Submersible trash pumps are equipped with a 2" discharge port and easily handle solids up to one inch in diameter. A vortex action discharges solids away from the cast iron multi-vane impeller to prevent clogging.



*Easy Cleanout — The base of Multiquip Submersible Trash Pumps can be quickly removed for service or inspection.*

Strain relief cord protection

Carrying handle

Thermal overload protection

Cast iron pump casing for demanding environments

Oil-filled seal provides positive lubrication when running dry

Easy cleanout

Cast iron impeller

Side discharge

ST-2005TCUL  
2" Trash Pump  
115V  
72 GPM



## Stainless Steel Trash Pump

### Pump Casing

High-strength plastic and stainless steel design for corrosive environments.

### 316 Stainless Steel

Resists corrosion; ideal for marine and certain chemical applications.

### Impeller

Abrasion-resistant plastic design for long life and chemical resistance.



CX-400  
2" Trash Pump  
115V  
72 GPM



ST-2010TCUL  
2" Trash Pump  
115V  
95 GPM



# Specifications — Multiquip Submersible Pumps

Model	Impeller	Disc Size in (mm)	Max. Solids in (mm)	Total Head ft (m)	Capacity GPM (lpm)	H.P. (kw)	Voltage; Phase	Starting Amp.	Running Amp.	Thermal Overload Protection	Cable Length ft. (cm)	Diameter in (cm)	Height in (cm)	Weight lb (kg)
<b>CENTRIFUGAL</b>														
S-500UL	Rubber	2 (51)	—	36 (11)	63 (238)	.5 (.37)	115V 1Ø	44.1	6.3	Yes	26 (7.9)	7.5 (19)	13.75 (34.9)	21 (9.5)
S-500P	Rubber	2 (51)	—	34 (10.4)	61 (230)	.5 (.37)	115V 1Ø	50.4	7.2	Yes	26 (7.9)	8.75 (22.2)	13.75 (34.9)	22 (10)
ST-1503CUL*	Cast Ductile Iron	1.5 (38)	—	28 (8.5)	45 (170)	.33 (.25)	115V 1Ø	42	6	Yes	25 (7.6)	6.7 (17)	16.9 (42.9)	33 (15)
ST-2005CUL2*	Cast Ductile Iron	2 (51)	—	42 (12.8)	85 (322)	.5 (.37)	115V 1Ø	41	8	Yes	25 (7.6)	6.7 (17)	18.4 (46.7)	33 (15)
ST-2010CUL*	Cast Ductile Iron	2 (51)	—	55 (16.7)	95 (360)	1 (.75)	115V 1Ø	63	12.5	Yes	50 (15.2)	6.7 (17)	20 (51)	55 (25)
ST-2010B	Cast Ductile Iron	2 (51)	—	55 (16.7)	95 (360)	1 (.75)	230V 1Ø	30	6.2	Yes	50 (15.2)	6.7 (17)	20 (51)	55 (25)
ST-2020BD	Cast Ductile Iron	2 (51)	—	66 (20)	145 (549)	2 (1.5)	230/460V 3Ø	28 (230V) 14 (460V)	5.6 (230V) 2.8 (460V)	Control Box Req'd.	50 (15.2)	6.7 (17)	23 (58)	57 (26)
ST-3020BCUL*	Cast Ductile Iron	3 (76)	—	72 (22)	170 (624)	2 (1.5)	230V 1Ø	52	10.5	Yes	50 (15.2)	6.7 (17)	28.5 (72)	67 (31)
ST-3050D	Cast Ductile Iron	3 (76)	—	86 (26)	270 (1,022)	5 (3.75)	230/460V 3Ø	77 (230V) 39 (460V)	14.2 (230V) 7.1 (460V)	Control Box Req'd.	50 (15.2)	10.2 (25.9)	26.8 (68)	120 (54)
ST-4102	Cast Ductile Iron	4 (101)	—	138 (42)	371 (1,404)	10 (7.5)	230V 3Ø	145 (230V)	27.2 (230V)	Control Box Req'd.	50 (15.2)	12.9 (32.7)	31.9 (81)	220 (100)
ST-4104	Cast Ductile Iron	4 (101)	—	138 (42)	371 (1,404)	10 (7.5)	460V 3Ø	72.5 (460V)	13.6 (460V)	Control Box Req'd.	50 (15.2)	12.9 (32.7)	31.9 (81)	220 (100)
ST-6152	Cast Ductile Iron	6 (152)	—	93 (28)	790 (2,990)	15 (11)	230V 3Ø	260 (230V)	39.5 (230V)	Control Box Req'd.	50 (15.2)	13.5 (34.2)	32.7 (83)	242 (109)
ST-6154	Cast Ductile Iron	6 (152)	—	93 (28)	790 (2,990)	15 (11)	460V 3Ø	130 (460V)	19.7 (460V)	Control Box Req'd.	50 (15.2)	13.5 (34.2)	32.7 (83)	242 (109)
<b>TRASH PUMPS</b>														
CX-400	Plastic	2 (51)	1 (25)	34 (10.3)	72 (273)	.5 (.37)	115V 1Ø	37	7	Yes	19 (5.6)	10 (25.4)	17 (43)	25 (11)
ST-2005TCUL*	Cast Ductile Iron	2 (51)	1 (25)	34 (10.3)	72 (273)	.5 (.37)	115V 1Ø	25	6.2	Yes	25 (7.6)	10.3 (26.7)	17 (43)	57 (26)
ST-2010TCUL*	Cast Ductile Iron	2 (51)	1 (25)	45 (13.7)	95 (360)	1 (.75)	115V 1Ø	53	9.4	Yes	50 (15.2)	10.3 (26.7)	22.7 (57.6)	77 (35)

\* Complies with Canadian Electrical Standards

## Performance Curves

