



MDI



FLOAT SWITCHES, GRINDER & NON-CLOG PUMPS, & TRANSDUCERS

CATALOG Z

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[illegible]

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HOW TO ORDER

BASIC SWITCH SERIES

MERCURY

A - TS-1

1 AMP @ 120 VAC Pilot Duty 10°

B - WATS-1

1 AMP @ 120 VAC Pilot Duty 90°

C - TS-10

13 AMPS @ 120 VAC / 5 AMPS @ 240 VAC 10°

D - NATS-20

13 AMPS @ 120 VAC / 6 AMPS @ 240 VAC 30°

E - WATS-20

13 AMPS @ 120 VAC / 6 AMPS @ 240 VAC 90°

MECHANICAL

G - ½ H.P. 13/15 AMPS 90°

H - 1 and 2 H.P. 15 AMPS 90°

K - 10 AMPS Pilot Duty Narrow Angle Tetherless

L - 1 & 2 H.P. 25 AMPS 90°

N - 10 AMPS Pilot Duty Narrow Angle 35°

P - ½ H.P. Narrow Angle 25°

R - ½ H.P. Narrow Angle Tetherless

S - Small 5 AMPS 120/250 VAC 90°

X - Small 5 AMPS 120/250 VAC Narrow Angle 15°

FLOAT SIZE & STANDARD COLOR CODE

<u>NORMALLY OPEN</u>	<u>NORMALLY CLOSED</u>	<u>BASIC SWITCH SERIES</u>
S -SMALL MERCURY BLACK (ABS ONLY)	S -SMALL MERCURY BLACK (ABS ONLY)	A & B SERIES
M -MERCURY BLACK (HIPS ONLY)	B -MERCURY YELLOW (HIPS ONLY)	C, D, & E SERIES
F -SMALL MECHANICAL BLACK (ABS ONLY)	F -SMALL MECHANICAL BLACK (ABS ONLY)	S & X SERIES
DOUBLE THROW F -SMALL MECHANICAL BLACK (ABS ONLY)		
F -MECHANICAL BLACK (HIPS & ABS)	Y -MECHANICAL YELLOW W -MECHANICAL WHITE (ABS ONLY)	G, H, K, L, P & R SERIES
DOUBLE THROW G -MECHANICAL GREEN (ABS ONLY)		G, H, K, P & R SERIES
82°C/180°F R -MECHANICAL RED (ABS ONLY)	82°C/180°F B -MECHANICAL BLUE (ABS ONLY)	G, H, K, L, P & R SERIES
105°C/221°F T -MECHANICAL TEEL (POLYCARB/ABS ONLY)	105°C/221°F T -MECHANICAL TEEL (POLYCARB/ABS ONLY)	G, P & R SERIES

TERMINATION AND LABEL DESIGNATION

00 - Standard skive (See Fig 4)

Recognized: No Label

C1 - 120 VAC Series plug (See Fig 1)

Listed: Label on 6' min. cord

F1 - 120 VAC Series plug (See Fig 1)

Listed: Label on Float - 6' min. cord

R1 - 120 VAC Series plug (See Fig 1)

Recognized: No Label - 6' min. cord

C2 - 240 VAC Series plug (See Fig 2)

Listed: Label on 6' min. cord

F2 - 240 VAC Series plug (See Fig 2)

Listed: Label on Float - 6' min. cord

R2 - 240 VAC Series plug (See Fig 2)

Recognized: No Label - 6' min. cord

R3 - 3 Pin barrel plug (See Fig 3)

Recognized: No Label

F0 - Standard skive (See Fig 4)

Recognized: Label on Float

J G F 2 O W 10 00 W

FLOAT MATERIAL

1 - High Impact Polystyrene (HIPS) for 60°C/140°F

2 - Acrylonitrile Butadiene Styrene (ABS) for 82°C/180°F

3 - ABS/PolyCarbonate (PC/ABS) 105°C/221°F (Not UL or CSA approved)

CORD LENGTH

From 01 to 99 feet. Lengths are in even foot increments. Longer cord lengths available.

OPTIONAL

B - Individually boxed

W - External weighted

C - Capillary Blocks

T - Cable Tie Tether

TC - Tether Clamp

G - Gold Contacts

(G Series only)

CONTACTS

O - Normally Open

C - Normally Closed

D - Double Throw

CORD TYPE AND MATERIAL

Y - 18 Gauge - Chlorinated Polyethylene CPE Jacketed (SJOW)

W - 16 Gauge - Chlorinated Polyethylene CPE Jacketed (SJOW)

N - 16 Gauge - Chlorinated Polyethylene Yellow CPE Jacketed (SJOOW)

L - 16 Gauge - Chlorinated Polyethylene Yellow CPE Jacketed (SOOW)

X - 16 Gauge - Polyvinyl Chloride PVC Jacketed (SJTOW)

T - 16 Gauge - Teflon TFE Jacketed (Not UL or CSA approved cord)

U - 14 Gauge - Chlorinated Polyethylene CPE Jacketed (SJOW)

P - 12 Gauge - Chlorinated Polyethylene CPE Jacketed (SJOW)

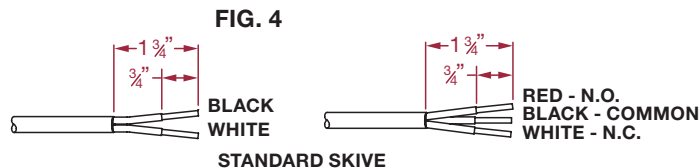
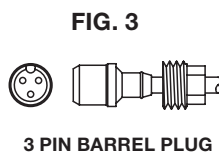
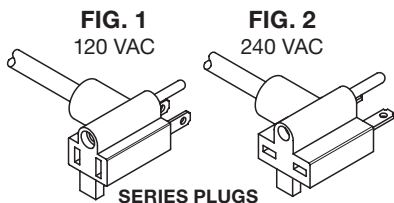
OPTIONAL PEAR FLOAT

Same MDI switch, larger pear shaped float

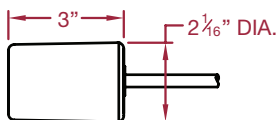
This option only comes in ABS plastic

GOLD CONTACTS MECHANICAL FLOAT SWITCHES

INTRINSICALLY SAFE RATINGS: 160 µA TO 100 mA



Mercury Float Switches



A Series

10° Narrow Angle Operation
1 AMP @ 120 VAC

B Series

90° Wide Angle Operation
1 AMP @ 120 VAC



FILE #E-93774



FILE #E-93774



FILE #LR 41198

C Series

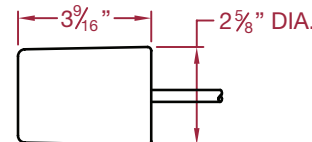
10° Narrow Angle Operation
13 AMPS @ 120 VAC
5 AMPS @ 240 VAC

D Series

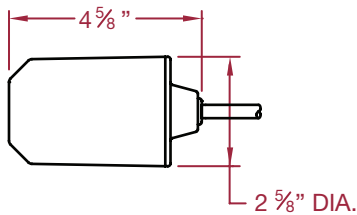
30° Narrow Angle Operation
13 AMPS @ 120 VAC
6 AMPS @ 240 VAC

E Series

90° Wide Angle Operation
13 AMPS @ 120 VAC
6 AMPS @ 240 VAC



Mechanical Float Switches (Mercury Free)



Heavy Duty Floats

H Series

90° Operating Angle
1 H.P. @ 120 VAC
2 H.P. @ 240 VAC
15 AMPS @ 120/240 VAC
96 AMPS overload

L Series

90° Operating Angle
1 H.P. @ 120 VAC
2 H.P. @ 240 VAC
25 AMPS @ 120/240 VAC

Standard Duty Floats

G Series

90° Operating Angle
1/2 H.P. @ 120/240 VAC
15 AMPS @ 120/240 VAC w/ 14 GA. cord
13 AMPS @ 120/240 VAC w/ 16 GA. cord
58.8 AMPS overload

P Series

25° Narrow Angle Operation
1/2 H.P. @ 120/240 VAC
15 AMPS @ 120/240 VAC w/ 14 GA. cord
13 AMPS @ 120/240 VAC w/ 16 GA. cord
58.8 AMPS overload

R Series

Tetherless with Internal Weight
Narrow Angle Operation
1/2 H.P. @ 120/240 VAC
15 AMPS @ 120/240 VAC w/ 14 GA. cord
13 AMPS @ 120/240 VAC w/ 16 GA. cord
58.8 AMPS overload

Pilot Duty Floats

K Series

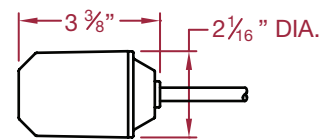
Tetherless with Internal Weight
Narrow Angle Operation
10 AMPS @ 120/240 VAC
1/4 H.P. @ 120/240 VAC
34.8 AMPS overload

N Series

35° Narrow Angle Operation
10 AMPS @ 120/240 VAC
1/4 H.P. @ 120/240 VAC
34.8 AMPS overload



FILE #LR 41198



Mini Floats

S Series

90° Operating Angle
5 AMPS @ 120/240 VAC
5 AMPS @ 30 VDC

X Series

15° Narrow Operating Angle
5 AMPS @ 120/240 VAC
5 AMPS @ 30 VDC

Gold Series Switch

Available in: **"G, N, & K" Series**
Add the suffix "G" for Gold Plated Contacts.

Example: GF2OW1000 G

Good for 160 μ A to 100 mA
Same standard angles.

Commonly used in intrinsically safe equipment.

SKF Series

This includes our standard K Series float switch (internally weighted), with a longer 3" ROJ and 1/2" skive.

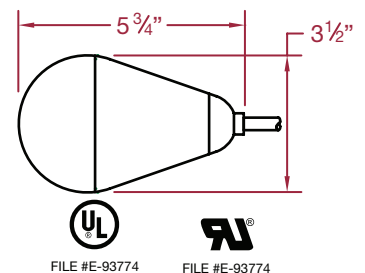
Features:

- SKF-5032-10 (10' Normally Open)
- SKF-5033-10 (10' Normally Closed)
- SKF-5034-10 (10' Double Throw)

"J" Package Option

"J" Package
Includes all series

Add the option
"J" Prefix
to any series



Installation Instructions

MDI Tether Clamp

This is a nice and simple way to mount your float switch to a pipe, either with a cable tie or pipe clamp. It can be used on 18-2 to 12-2 (18-3 to 14-3) cords.

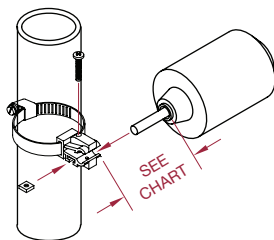
TC

(Includes the clamp, bolt and nut)

TC-1 (Includes the TC and 2 1/2" pipe clamp)

TC-2 (Includes the TC and 3 1/2" pipe clamp)

TC-10 (Includes the TC and 14" cable tie)



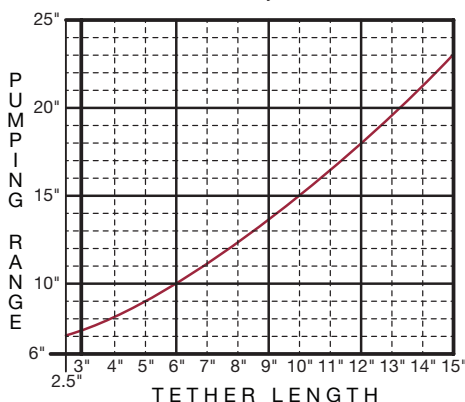
12-2	7 1/2 INCHES
14-3	5 INCHES
14-2, 16-3	4 INCHES
18-2, 18-3, 16-2	3 1/2 INCHES
WIRE GAUGE	MINIMUM LENGTH

Based on SJOW cord @ 65° F.

Flexibility of wire varies, test in actual application to verify

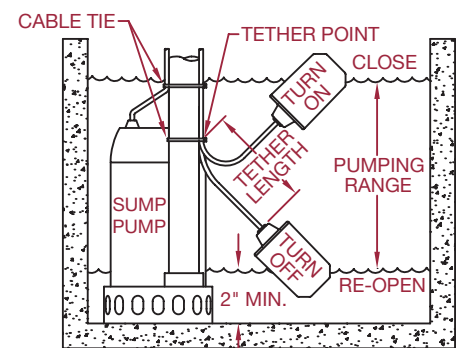
Tether Data

For CPE 16-2 SJOW jacketed cord

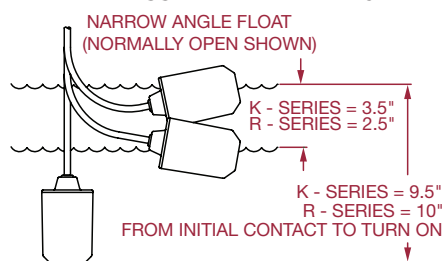


1. Attach cord, using a cable tie (tether clamp), to any convenient rigid surface as illustrated. This is known as the tether point. Do not tighten until both turn-on and turn-off levels are established.
2. To adjust greater distance between turn-on and turn-off, increase cord length between tether point or tether clamp and float. For less distance between turn-on and turn-off decrease cord.
3. Make sure the float is at least 2 inches above pump base, in the turn-off position, before tightening cable tie or tether clamp at the tether point.
4. Plug piggy-back switch cord (Series Plug) into GFCI outlet, then plug into piggy-back switch cord, and check for proper operation.

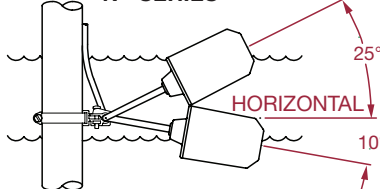
Typical Normally Open (Pump Down) Application



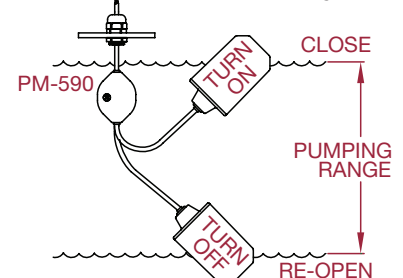
TETHERLESS INTERNALLY WEIGHTED



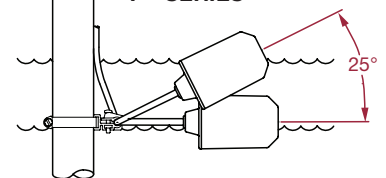
N - SERIES



EXTERNAL WEIGHT



P - SERIES

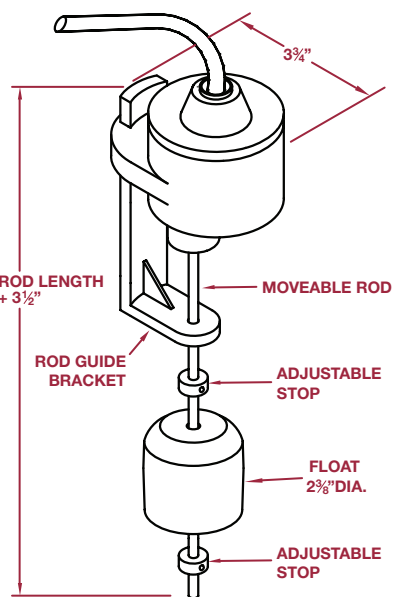




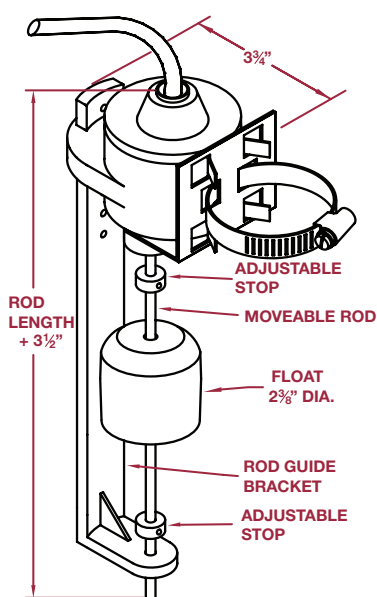
Upper Rod Guide
Plastic Bracket (-02)



Lower Rod Guide
Stainless Steel Bracket (-01)



Upper Rod Guide
No Bracket



Lower Rod Guide
Stainless Steel Pipe Clamp (-01)

RATINGS

(Standard Switch)

13 AMPS / 1/2 HP @ 120/240 V 50/60 Hz

(Optional Relay)

15 AMPS @ 120/240 VAC 50/60 Hz.

1 HP @ 120 VAC or 2 HP @ 240 VAC

PUMPING RANGE

Adjustable up to 6 inches (with standard 9" rod length)

MATERIALS

Enclosure and Guide are ABS Plastic

Float is black Polypropylene

MOUNTING

Standard mounting holes for #8 screws on 2.06 inch centers are located under housing.

OPTIONAL PIPE MOUNT

This bracket allows for mounting to standard size sump discharge piping. Comes in Stainless Steel or PVC Plastic.

HOW TO ORDER

VS **01** - **120** **R1** **R9** **L** - **01**
A B C D E F

(Optional)

A - Contacts and Current

Blank - Standard switch

(This is CSA approved option)

O - Normally Open

C - Normally Closed

D - Double Throw

01 - Normally Open 1 HP @ 120 VAC Relay

C1 - Normally Closed 1 HP @ 120 VAC Relay

02 - Normally Open 2 HP @ 240 VAC Relay

C2 - Normally Closed 2 HP @ 240 VAC Relay

B - Length of cord in inches (012 - 720)

C - Termination

00 - 1 3/4" ROJ & 3/4" Strip or Skive (Standard)

R1 - Piggyback 120 VAC Component Recognized

C1 - Piggyback 120 VAC W/ Listed Cord Label

R2 - Piggyback 240 VAC Component Recognized

C2 - Piggyback 240 VAC W/ Listed Cord Label

R3 - 3-Pin Barrel Plug Component Recognized

C3 - 3-Pin Barrel Plug W/ Listed Cord Label

D - Rod Length

Rod length in inches (9" is standard)

Rods available up to 24"

E - Rod Guide

L - Lower rod guide

U - Upper rod guide

(Optional)

F - With or Without Bracket

01 - Pipe Clamp & Stainless Steel Bracket

02 - Pipe Clamp & Plastic Bracket



FILE #LR 41198



FILE #E-93774



FILE #E-93774

PRODUCT DESCRIPTION

The Twin Float pump switch consists of two floats, each float contains our standard "JH" series switch. The boot contains a heavy-duty latching relay, which enables the floats to function together. The relay eliminates pump chatter in turbulent conditions.

The unit is well suited for narrow and deep sump pump pits. On the N.O. (pump down) model, the pump is turned on when activated by the top float switch. The pump stays on until the bottom float switch turns it off, this allows a pumping range of about 12 - 60" with the standard 060 (60") cord length on the bottom float). This can be extended almost indefinitely with longer cords.

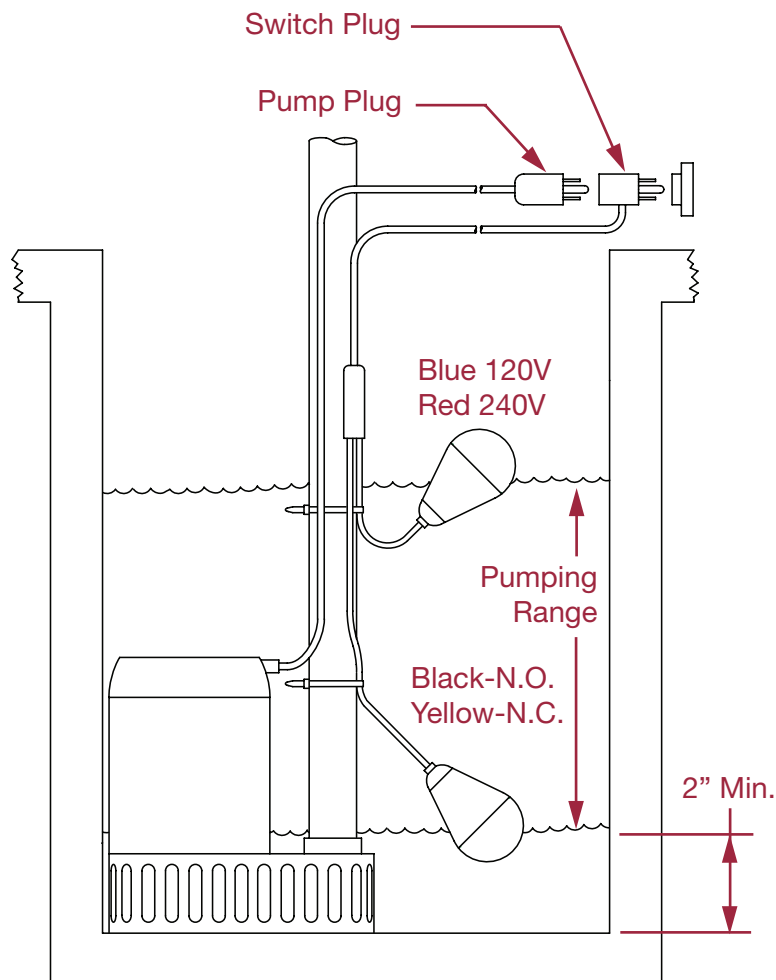


Ratings

15 AMPS @ 120 VAC
1 HP @ 120 VAC
OR
15 @ 240 VAC
2 HP @ 240 VAC

Standard colors

Top float color indicates voltage
Blue Float - 120 VAC
Red Float - 240 VAC
Bottom float color indicates action
Graphite - Pump Down (Normally Open)
Yellow - Pump Up (Normally Closed)



FILE #E-93774



FILE #E-93774

HOW TO ORDER

JTF D - 060 - U 15 R1
A B C D E

A - Switch Action

D - Pump Down (Normally Open)
U - Pump Up (Normally Closed)

B - Bottom Float Cord Length

12" Increments (Min. length 12")
060 is our standard 60" length

C - Cord Types (Currently 14 AWG only)

U - 14 AWG CPE jacketed SJOW cord

D - Power Cord Length in Feet

E - Power Cord (14 AWG PVC)

00 - Standard Skive
R1 - 120 VAC (15 AMP piggyback)
R2 - 240 VAC (15 AMP piggyback)

Perfect for Sewage, Sludge and Slurries

Features / Benefits

- Durable cage design with large diameter 316 SS diaphragm seal that is non-clogging and damage resistant to floating solids
- Incorporates lightning and surge protection utilizing dual arrestor technology, grounded to case, eliminating both power supply surges and lightning ground strike transients (surge protection is not guaranteed and is not covered by warranty) on PBLT2 models
- Maintenance free filter eliminates particulate or water droplets from entering and damaging the transducer
- UL approved intrinsically safe on PBLTX models for use in hazardous locations when used with proper barrier
- Excellent chemical compatibility for wide application use
- NPT connection allows the unit to be rigidly installed in a pipe/conduit, or the addition of a A-625 hanging loop for attaching a chain for pulling out of the installation

Applications

- Wastewater
- Sludge pits, clarifiers, digesters
- Alum tanks
- Chemical storage tanks
- Oil tanks
- Lime slurry
- Sumps
- Reservoirs

Description

The SERIES PBLT2 & PBLTX Submersible Level Transmitters are manufactured for years of trouble free service in the harshest applications. This Series measures the height of liquid above the position in the tank referenced to atmospheric pressure. The transmitter consists of a piezo-resistive sensing element, encased in a 316 SS housing with cage and large diameter 316 SS diaphragm seal.



Specifications

Service	Compatible liquids.
Wetted Materials	316 SS, 316L SS, epoxy, cable: ETFE or polyurethane.
Accuracy	±0.25% FS (includes linearity, hysteresis, and repeatability)*.
Temperature Limit	PBLT2: 0 to 200°F (-18 to 93°C); PBLTX: 0 to 176°F (18 to 80°C).
Compensated Temperature Range	PBLT2: 0 to 180°F (-18 to 82°C); PBLTX: 0 to 176°F (18 to 80°C).
Thermal Effect	±0.02% FS/°F.
Pressure Limit	2X FS.
Power Requirement	PBLT2: 13 to 30 VDC, PBLTX: 10 to 28 VDC.
Output Signal	4 to 20 mA DC, two wire.
Response Time	50 ms.
Loop Resistance	900 Ω.
Electrical Connection	Wire pigtail.
Mounting Orientation	Suspended in tank below level being measured.
Electrical Protection	PBLT2: Lightning and surge protection, PBLTX: none.
Weight	4.3 lb (2.0 kg).
Agency Approvals	PBLT2: CE, PBLTX: CE, cULus intrinsically safe for Class I, Div. 1, Groups A, B, C, & D; Class II, Dev. 1, Groups E, F, & G; Class III, Div. 1. **
*Configured ranges below 5 psi (11.54 ft w.c.) (3.52 m w.c.) ±1% FS accuracy	
**Up to 196 ft (59.5 m) for ETFE cable; Up to 333 ft (101.5 m) for polyurethane cable	

How to Order

Use the **bold** characters from the chart below to construct a product code.

PBLT 2 - 5 - 40 - PU

SERIES

- 2** - Submersible level transmitter
- X** - Submersible level transmitter (Intrinsically safe)

*RANGE psi (ft w.c.) [m w.c.]

- 5** - 5 (11.54) [3.52]
- 10** - 10 (23.09) [7.04]
- 15** - 15 (34.63) [10.56]
- 20** - 20 (46.18) [14.08]
- 3.5M** - 4.87 (11.48) [3.5]
- 5M** - 7.11 (16.40) [5]
- 10M** - 14.21 (32.81) [10]

CABLE TYPE

- (blank)** - ETFE
- PU** - Polyurethane

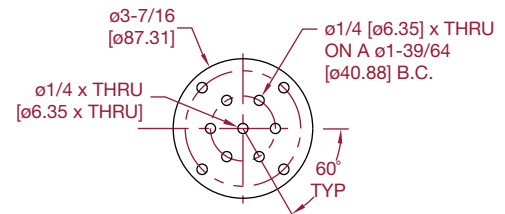
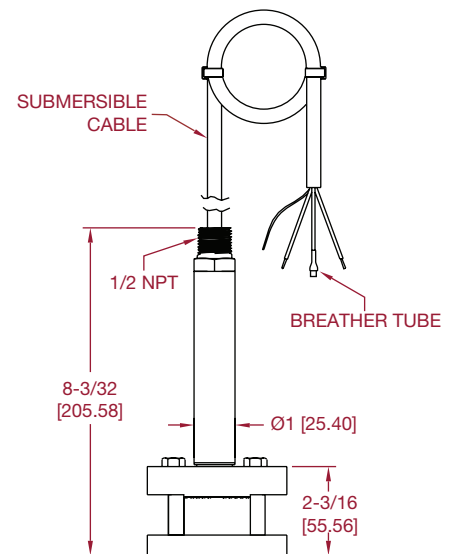
**CABLE TYPE

- 40** - 40 (12.2)
- 60** - 60 (18.3)
- 5M** - 16.40 (5)
- 10M** - 32.81 (10)
- 18M** - 59.06 (18)

**Configure cable lengths available from 10 to 2000ft (3 to 610 m)

*Additional pressure ranges available (Consult Factory)

Dimensions



Perfect for Ground Waters and Wells

Description

The SBLT2 Submersible Level Transducer is manufactured for years of trouble free service. The transmitter consists of a piezo-resistive sensing element, encased in a 316 SS housing. Superior lightning and surge protection utilizing dual arrestor technology, grounded to case, eliminating both power supply surges and lightning ground strike transients (surge protection is not guaranteed and is not covered by warranty). Bullet nose design protects diaphragm from damage. Comes equipped with a 270-pound tensile strength, shielded, vented cable. Ventilation tube in the cable automatically compensates for changes in atmospheric pressure above the tank.

Applications

Well monitoring; Ground water monitoring; Environmental re-mediation; Surface water monitoring; Down hole; Water Tanks.

Electrical Installation

An external power supply delivering 13-30 VDC with minimum current capability of 40 mA DC (per transmitter) is required to power the control loop. See figure below for connection of the power supply, transmitter and receiver.

Specifications

Service: Compatible liquids

Wetted Materials: 316 SS, 316L SS, epoxy adhesive

Cable: Polyether Polyurethane or ETFE

Bullet Nose: PVC

Accuracy: ±0.25% of full scale

Temperature Limit: 0 to 150°F (-18 to 66°C)

Compensated Temperature Range: 0 to 140°F (-18 to 60°C)

Thermal Effect: Less than ±0.02%/°F

Pressure Limit: 2X full scale

Power Requirement: 13 to 30 VDC

Output Signal: 4 to 20 mA DC, 2-wire

Response Time: 50 ms

Max. Loop Resistance: 850 ohms at 30 VDC

Electrical Connections: Wire pigtail

Mounting Orientation: Suspended in tank below level being measured

Weight: 2.2 lb. (1.0 kg)

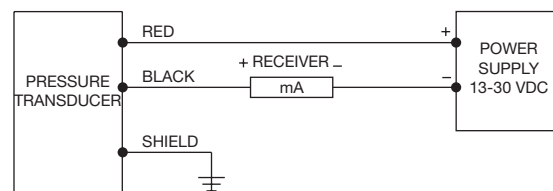
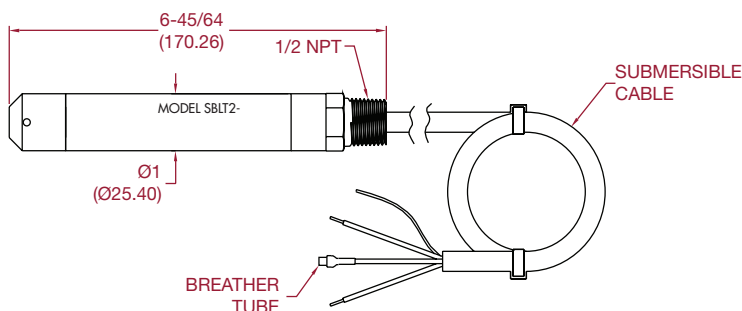
Electrical Protection: Lightning and surge protection

WARNING:

A voltage potential between the ground wire of the unit and the ground of other equipment can lead to electrolytic corrosion. Always ensure the grounding system provides an equipotential between the transmitter and the earthing ground connection. Avoid using the power system protective ground since this will often have a significant potential difference to the transmitter ground. Also note that dissimilar metals in the ground system may cause electrolysis corrosion of the transmitter or other components in the ground system.

During installation, connect a voltmeter or ammeter between the shield ground wire and the grounding connection. If there is a measurable voltage or current electrolytic corrosion may be a serious possibility. If there is a potential difference then some isolation system will be required. Improper grounding may lead to damage or poor signal integrity.

Dimensions



Model	Range psi (ft w.c.) [m w.c.]	Cable Length ft (m)	Cable Type
SBLT2-5-40-ETFE	5 (11.54) [3.52]	40 (12.2)	ETFE
SBLT2-10-40-ETFE	10 (23.09) [7.04]	40 (12.2)	ETFE
SBLT2-15-60-ETFE	15 (34.63) [10.56]	60 (18.3)	ETFE
SBLT2-20-60-ETFE	20 (46.18) [14.08]	60 (18.3)	ETFE
SBLT2-5-40	5 (11.54) [3.52]	40 (12.2)	Polyurethane
SBLT2-10-40	10 (23.09) [7.04]	40 (12.2)	Polyurethane
SBLT2-15-60	15 (34.63) [10.56]	60 (18.3)	Polyurethane
SBLT2-20-60	20 (46.18) [14.08]	60 (18.3)	Polyurethane
SBLT2-3.5M-5M	4.97 (11.48) [3.5]	16.40 (5)	Polyurethane
SBLT2-5M-10M	14.21 (32.81) [10]	32.81 (10)	Polyurethane
SBLT2-10M-18M	25.58 (59.06) [18]	59.06 (18)	Polyurethane

The maximum receiver load resistance (RLmax) for the DC power supply voltage (Vsup) is expressed by the formula:

$$RL_{max} = \frac{V_{sup} - 13V}{0.02A}$$

Shielded cable is recommended for control loop wiring.

Intrinsically Safe Approval:

Change model number from SBLT2 to SBLTX

Custom ranges or Cable Lengths - Contact MDI

Indoor Tank Alarms

SP-3000 ALARM - BBLA INDOOR ALARM WITH **XF2OY1500** MECHANICAL FLOAT

SP-3100 ALARM - BBLA INDOOR ALARM WITH **AS2OY1500** MERCURY FLOAT



The BBLA alarm system is designed to monitor liquid levels in sump basins, holding tanks, lift stations tanks and many other non-potable water and wastewater applications. Comes individually boxed with Cable tie and Instruction sheet.

Auxiliary contacts with common, normally open and normally closed terminals are available behind a panel, on the lower right side, held in place by two #1 Phillips head screws. The barrier terminal screws are Phillips/Standard slot combo head type.

The BBLA is design to sound a piezo horn and illuminate a red light to notify of an alarm situation. There is a green line voltage power indicator light to show that the unit is functioning, as well as a silence switch to turn horn off while fixing the alarm (the red alarm light will remain on until the alarm conditions are remedied).

SPECIFICATIONS

• Dimensions	7" X 4" X 2 1/2"
• Enclosure	NEMA 1 thermoplastic (external mounting feet)
• Horn	85 dB
• Weight	1 1/3 pounds
• Voltage	Primary: 120 VAC, Secondary 12 VAC, 60 Hz (Alarm condition 2.5 Watts max)
• Power cord	6 feet 120 VAC (NEMA 5-15P)
• External block connection	Float connection. DO NOT APPLY POWER! Class Two Output, 12 VAC
• Auxiliary contacts	120 VAC, 5 AMPS max 60 Hz
• Battery Back Up	9 Volt

Outdoor Tank Alarms

SP-4000 ALARM - OTA OUTDOOR ALARM WITH **NF2OW1500** MECHANICAL FLOAT

SP-4100 ALARM - OTA OUTDOOR ALARM WITH **CG2OY1500** MERCURY FLOAT



The OTA alarm system is designed to monitor liquid levels in sump basins, holding tanks, lift stations tanks and many other non-potable water and wastewater applications. Comes individually boxed with Cable tie and Instruction sheet.

This alarm comes in a Type 4X nonmetallic enclosure with external mounting feet and a gasketed door for outdoor use. It has a large red illuminating beacon, front cover mounted piezo, with Test and Silence push button switches.

The OTA is design to sound an audible piezo horn and illuminate the red beacon light to notify of an alarm situation. There is a silence switch to turn the piezo horn off while fixing the alarm (the red alarm light will remain on until the alarm conditions are remedied).

SPECIFICATIONS

• Dimensions	8" X 4 1/2" X 4 1/4"
• Enclosure	Type 4X nonmetallic enclosure rated for indoor or outdoor use
• Piezo Horn	85 dB
• Weight	2 pounds
• Voltage	Primary and Secondary: 120 VAC, 60 Hz
• Power cord	6 feet 120 VAC (NEMA 5-15P)
• Float connection	External block connection

Pedestal Alarm System

This Pedestal Alarm System is a water tight junction box to keep your septic connections safe and secure.

Features

- New low-profile design with external silence switch
- Easy-to-access cover
- Rugged water tight enclosure rated for outdoor use
- 240 VAC receptacles for plugging in the pump and switch
- Built-in high water alarm with horn and light (test feature included)
- 120 VAC with 9 VAC battery back-up alarm, complete with automatic reset
- Spacious panel designed with 120 or 240 VAC pump power supply and 120 VAC alarm power
- Large access port with gas/liquid tight seal for cord connections
- Test-normal-silence switch (external)
- Auxiliary contacts standard
- Optional push breaker, cycle counter, etm
- Two-year limited warranty

Specifications

• Enclosure Dimensions:	.	.	6" x 6" x 7"
• Overall Dimensions:	.	.	6" x 6" x 35"
• Enclosure:	.	.	NEMA 3R, UV-protected PVC rated for outdoor use
• Horn:	.	.	85 db at 10'
• Battery Back-up:	.	.	9 VDC for alarm horn
• Light:	.	.	10 watts 120 VAC
• Receptacle:	.	.	240 VAC
• Full Load Amps:	.	.	12
• Weight:	.	.	11 lbs.
• Alarm Float:	.	.	Mechanical float (normally open)
• Pump Voltage:	.	.	120 or 240 VAC, 60 Hz single phase
• Alarm Voltage:	.	.	120 VAC, 60 Hz single phase
• Standard Auxiliary Contacts:	.	.	240 VAC, 5 amp max resistive/60 Hz



Caddy Box - Junction Box

Caddy Box Plug-in Junction Box

Features

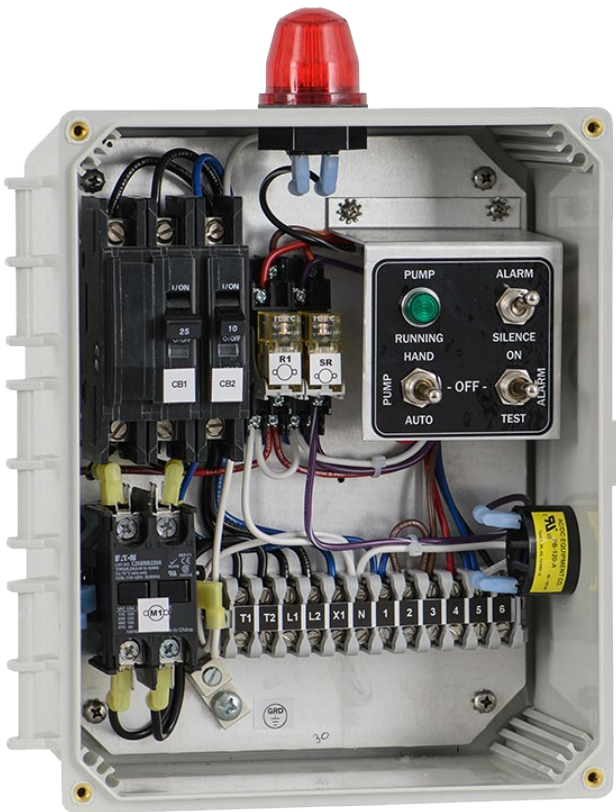
- NEMA 4X watertight enclosure with captive bolted hinged door
- Built-in 120 VAC receptacle for pump and pump switch
- Gas-tight cord seal and PVC mounting hardware included
- Terminal strip and ground screw for power supply and alarm system
- Two-year limited warranty

Specifications

• Enclosure Dimensions:	.	.	7.25" x 5.5" x 5"
• Overall Dimensions:	.	.	8-3/4" x 5-1/4" x 5"
• Enclosure:	.	.	NEMA 4X, UV-protected
• Voltage:	.	.	120 VAC single phase 1 HP
• Weight:	.	.	5.3 lbs
• Pump Receptacle:	.	.	120 VAC



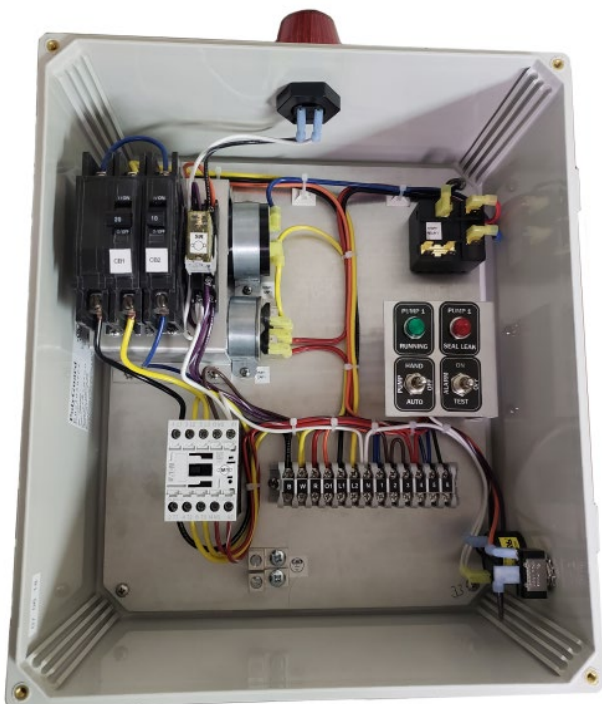
50A006-CBXST (Simplex Internal Start)



Features & Benefits

- Circuit Breakers for Pump Circuit
- Definite Purpose Contactor
- Easy to Access Terminal Block
- Usable with 115, 208 or 230 VAC
- Alarm Silence & On-Off-Test Switches
- Externally Mounted Audible Alarm
- Pump Hand-Off-Auto Switch
- Pump Running Light
- External Alarm Light
- Ground Lugs
- Color Coded Internal Wiring
- Rugged Weather Resistant Hinged Poly Enclosure w/SST Latch
- Built and Labeled to UL 508A Standard w/Nema 4x Rating
- Provided with Wiring Schematic and Detailed Connection Diagram for Installer
- Mounting Feet for Enclosure
- External Toggle for Test Alarm & Alarm Silence
- Also Available in **Duplex** (50A506-CBXST)

50A700 (Simplex External Start)



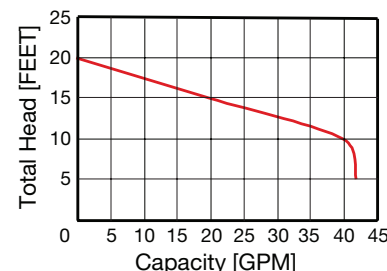
Features & Benefits

- Available in 120/208/240VAC-1PH models
- 4X rated durable, weather-resistant enclosure with mounting feet and stainless steel latch
- Main circuit breaker
- DP-rated motor contactor
- Easy-to-access, finger-safe terminal block
- Secondary fuse protection for control circuit
- Pump hand-off-auto switch with pump run light
- Full alarm circuit (visual and audible alarms)
- Alarm test and silence switches
- Color-coded internal wiring
- Connection diagram and schematic
- Three-float system (off, on, high water)
- Three 15' mechanical float switches included
- Built and labeled to UL 508A standard
- Also Available in **Duplex** (50A750)

Sump Pump: CPS3-11

Basements, Dewatering, Septic Systems, Decorative Ponds

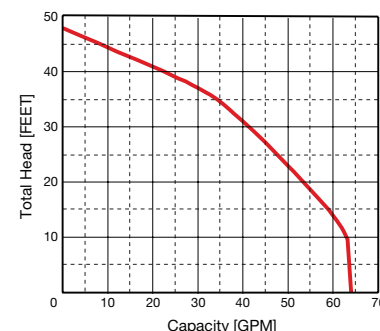
- 1/3 HP @ 115 VAC 60 Hz
- Single Phase @ 4.0 AMPS
- 1750 RPM, 60 Hz NEMA L
Includes Overload Protection
- 16 AWG 10 Foot (UL/cUL) Cord
- Discharge 1 1/2" NPT. Vertical
- Liquid Temperature 140 Degrees F. (Intermittent)
- Hardware 300 Series Stainless Steel
- Cast Iron Motor Housing
- Shaft Nickel Plated
- Bearing (Upper & Lower)
Single Row, Ball, Oil Lubricated
- Cast Iron Volute
- Seal Plate Cast Iron
- Impeller Nylon + 30% Fiberglass
- Square Rings Buna-N
- Oil Filled, Class B
- Permanent Split Capacitor



Effluent Pump: CPE5-12

Dewatering, Elevator Pits, Septic Systems, Residential & Commercial Developments, STEP Systems

- 1/2 HP @ 115 VAC 60 Hz
- Single Phase @ 8.5 AMPS
- 3450 RPM, 60 Hz NEMA L
Includes Overload Protection
- 16 AWG 20 Foot (UL/cUL) Cord
- Discharge 2" NPT. Vertical
- Solids Handling 3/4"
- Liquid Temperature 140 Degrees F. (Intermittent)
- Hardware 300 Series Stainless Steel
- Cast Iron Motor Housing
- Shaft Stainless Steel
- Bearing (Upper & Lower)
Single Row, Ball, Oil Lubricated
- Cast Iron Volute
- Seal Plate Cast Iron
- Impeller Cast Iron/Vortex
- Square Rings Buna-N
- Oil Filled, Class B
- Permanent Split Capacitor



Sewage Pumps

Submersible Non-Clog Sewage Pumps Are Designed for Typical Raw Sewage Application.

CPW5-12

- 1/2 HP @ 115 VAC 60 Hz
- Single Phase @ 11.5 AMPS
- 25' Head & 109 GPM
- 3450 RPM, 60 Hz NEMA L
Includes Overload Protection
- 16 AWG 20 Foot (UL/cUL) Cord
- Discharge 2" NPT. Vertical
- Solids Handling 2"
- Liquid Temperature 140°F (60°C)
Intermittent
- Hardware 300 Series Stainless Steel
- Cast Iron Motor Housing
- Bearing (Upper & Lower)
Single Row, Ball, Oil Lubricated
- Cast Iron Volute
- Cast Iron Impeller/Vortex
- Shaft Stainless Steel

MD500T

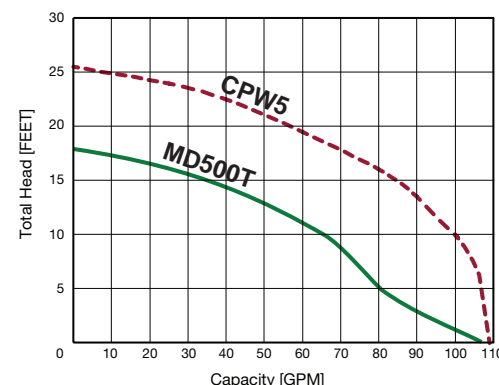
- 1/2 HP @ 115 VAC 60 Hz
- Single Phase @ 7.4 AMPS
- 18' Head & 108 GPM
- Automatic Reset Thermal Overload Protection
- 18 AWG 10 Foot Cord
- Discharge 2" NPT. Vertical
- Solids Handling 2"
- Liquid Temperature 190°F (88°C)
Intermittent
- Hardware 300 Series Stainless Steel
- Cast Iron Motor Housing
- Bearing (Upper & Lower)
Single Row, Ball, Oil Lubricated
- Cast Iron Volute
- Thermoplastic Impeller/Vortex



CPW5-12



MD500T-G



CPG2(H) Series - 1 & 2 HP Grinder

Internal or External Start Components Single or 3 Phase

The vortex impeller design of the grinder pump provides non-overloading performance and prevents clogging.

With Head to 133 feet and gallons per minute to 44.

The pump can easily handle waste from:

- Residential/Commercial Developments
- Wastewater Transfer
- Hospitals, Motels, Apartments
- Schools, Universities
- Churches
- Campgrounds
- Office Complexes

Some of the other pump features:

- Single or 3 Phase
 - 1 HP @ 115 V @ 13 AMPS
 - 1 HP @ 208/230 V @ 6.5 AMPS
 - 2 HP @ 208/230 V @ 15 AMPS
 - 2 HP @ 230 V 3-Phase @ 9 AMPS
 - 2 HP @ 460 V 3-Phase @ 4.5 AMPS
- Liquid Temperature
 - 1 HP 140 Degrees F. (Intermittent)
 - 2 HP 150 Degrees F. (Intermittent)
- Start component
 - Internal (no control panel required)
 - External (must use start kit or components in control panel)

How to Order

CPG H 20 2 3 DS L - D2

HEAD
H - Add H for High Head (2 H.P. Only)

POWER
10 - 1 H.P.
20 - 2 H.P.

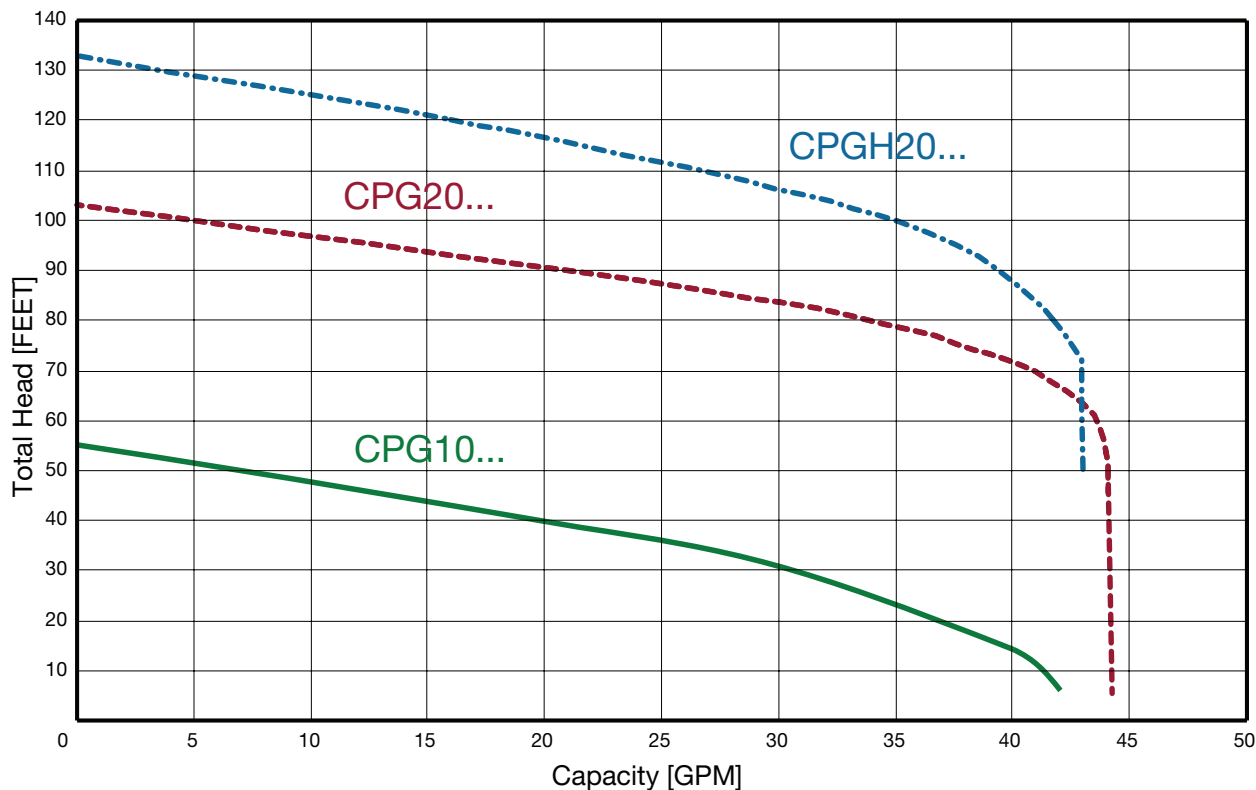
VOLTS
1 - 115 VAC (1 H.P. Only)
2 - 208/230 VAC
3 - 230 VAC (2 H.P. Only)
4 - 460 VAC (2 H.P. Only)
9 - 208 VAC (2 H.P. Only)

CORD LENGTH
1 - 10 Feet
2 - 20 Feet
3 - 30 Feet

DUAL SEAL
2 HP Feature Only

START COMPONENTS
Standard is Internal Start Components
A - Add A for Automatic - Float Included
L - Add L for External Start Components

2" DISCHARGE
Standard is 1-1/4" Discharge
D2 - Add a D2 for 2" Discharge



G2 Series - 2 HP Dual Seal Grinder

Internal or External Start Components



The MDI grinder pumps easily handle residential, light commercial or industrial sanitary waste, reducing it to fine slurry. The **G2** pump is designed for use in pressure sewer applications or any piping network.

The recessed vortex impeller design of this grinder pump provides trouble free, non-overloading operation over the entire performance curve. The **G2** grinder pump retrofits into many existing competitor pump installations. The **G2** pump operates with the same control panel and installation piping / rail system.

Some of the other **G2** series pump features:

- Interchangeable into competitor installations
- Dual mechanical seals (silicon carbide)
- Class H motor, internal overload protection
- 3 Bearing shaft support
- Internal moisture detection
- Heads to 106 & GPM to 68
- Strong, 2 HP Motor
 - 115 V @ 16.9 AMPS
 - 208 V @ 14 AMPS / 230 V @ 12.8 AMPS

How to Order

G 2 - 2 1 S I X - SL

HP
2 - 2 H.P.

VOLTS
1 - 115 VAC
2 - 230 VAC

PHASE
1 - Single Phase
3 - 3 Phase

PUMP FLOW
S - Standard Head
F - High Flow

START COMPONENTS
I - Internal Start Components
E - External Start Components

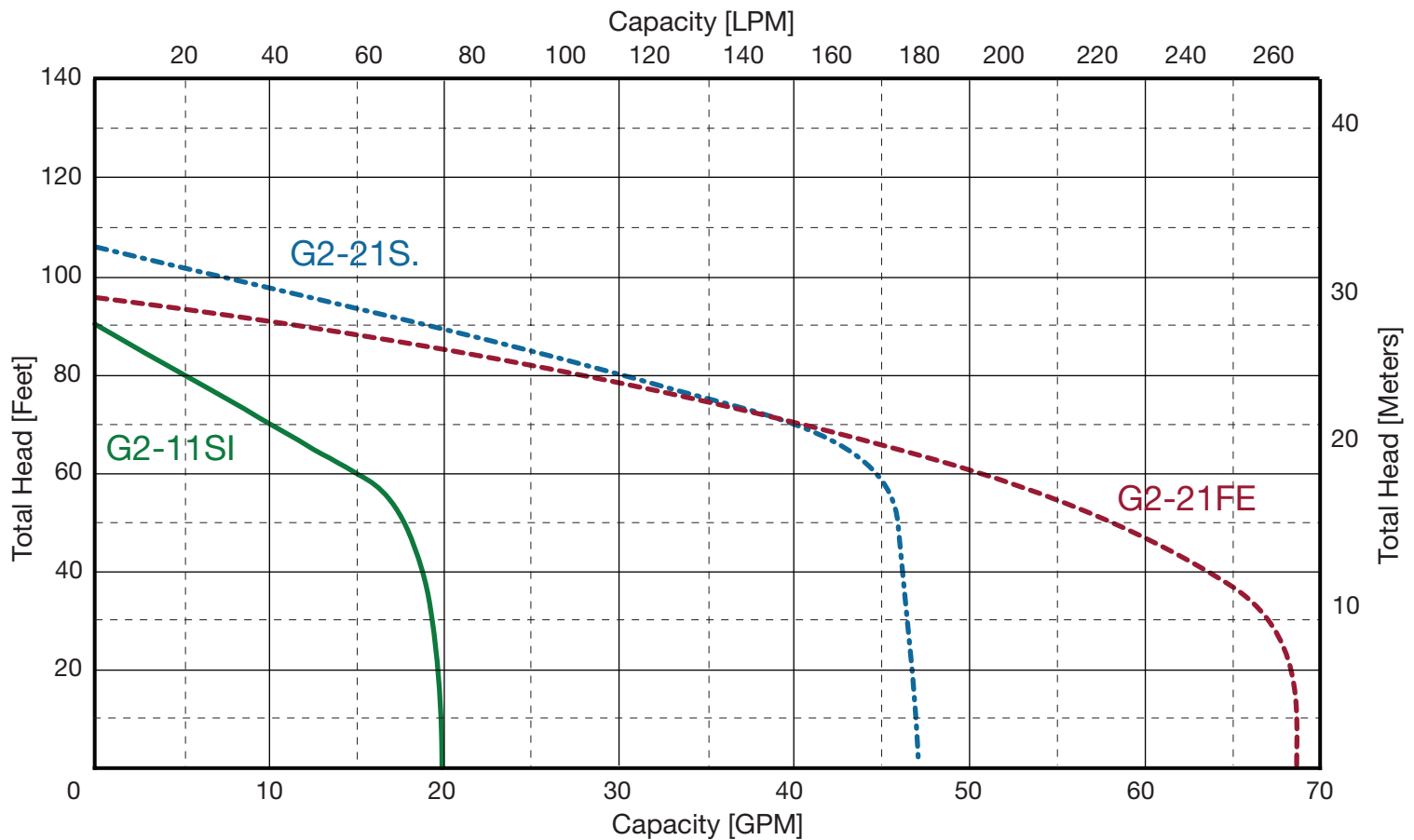
EXPLOSION PROOF (OPTION)
X - Add an X

AXIAL SLICER (OPTION)
SL - Add an SL

STANDARD
"Radial" Cutter
G2-21.E



OPTIONAL
"Axial Slicer"
G2-21.E-SL



M4VN - 4" Discharge



2-Vane Enclosed Impeller

- Efficient Operation, Non-clogging
- Pump-Out Vanes Prevent Material Build-up
- Pressure Balance on Shaft Seal for Long Life
- Positive Pumping Action through Impeller

Strong Performance

- Ideal for Higher Flows, Lower Heads
- Operate to Shut-off Head without Damage
- Non-Overloading Performance Curve
- 3-Bearing Shaft Support

Long Service Life

- Dual Silicon Carbide Shaft Seals
- Low Motor Operation Temperatures
- Continuously Lubricated Ball Bearings

Low Maintenance

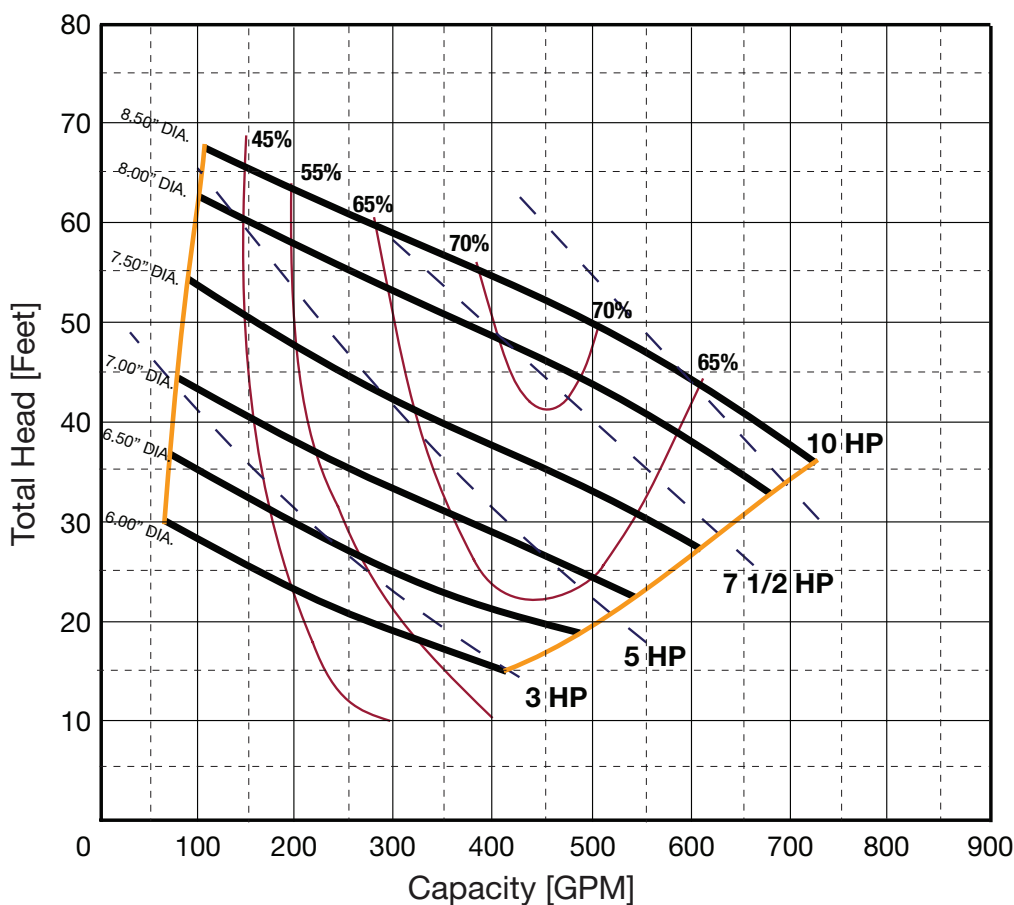
- Easily Replaceable Impeller Wear Ring Restores Original Pump Performance
- Unobstructed Impeller Passageway
- Grit-Resistant Silicon Carbide Shaft Seals
- Large, 3" diameter Solids-Handling
- High Service Factor Motor Handles Tough Electrical Operating Conditions

Capabilities

- Flows to 700 GPM
- Heads to 67 Feet
- 3 - 10 HP Range
- Voltage / Phase Options
 - 208 / 230 Volt 1-Phase
 - 208 / 230 / 460 Volt, 3-Phase
- ANSI Class 125 Horizontal Flange Discharge Connection
- Motor Speeds 1150 / 1750 RPM
- Solids-Handling 3"
- Recessed, Vortex Impeller
- Motor Service Factor 1.20

Features and Benefits

- Watertight Cable Entrance
- Strong Motor (U.S. Motor Manufacturer)
- Solid 3-Bearing Support Rated for 100,000 hour B-10 life.
- Severe Duty Dual Mechanical Seals
- Moisture Detection
- High Efficiency Hydraulic Design
- 4" Horizontal Standard Flange Connection
- High Performance Wear Ring
- Available in dry pit configuration



M4V Series

Long Service Life

- Easily Replaceable Impeller Wear Ring Restores
- Original Pump Performance
- Unobstructed Impeller Passageway
- Grit-Resistant Silicon Carbide Shaft Seals
- Large, 3" diameter Solids-Handling
- High Service Factor Motor Handles Tough Electrical Operating Conditions

Low Maintenance

- Easily replaceable impeller wear ring restores original pump performance
- Unobstructed impeller passageway
- Grit-resistant silicon carbide shaft seals
- Large, 3" diameter solids handling
- High service factor motor handles tough electrical operating conditions

Heavy Duty Pump Series

- Handles aggressive pumping applications
- Strong pumping capacities
- Centerline volute discharge
- Smooth, quiet operation

Strong Performance

- Ideal for higher flows
- Positive pumping action through impeller
- Pump-out vanes, prevent material build-up Non-overloading performance curve

Options Available

- Flows to 20,000 GPM
- Up to 350 HP
- Discharge to 24"
- Available in dry pit configuration

M4VB - 4" Discharge



Features and Benefits

- Watertight Cable Entrance
- Strong Motor (U.S. Motor Manufacturer)
- Solid 2-Bearing Support Rated for 100,000 hour B-10 life.
- Severe Duty Dual Mechanical Seals
- Moisture Detection
- High Efficiency Hydraulic Design
- 4" Horizontal Standard Flange Connection
- High Performance Wear Ring

Capabilities:

- Flows to 1850 GPM
- Heads to 165 Feet
- 3 - 60 HP Range
- Voltage Options
 - 208 / 230 / 460 / 575 Volt, 3-phase
- 4" ANSI Class 125 Horizontal Flange
- Motor Speed 870 / 1150 / 1750 rpm
- Solids Handling 3 3/16"
- Balanced, Enclosed, 2-Vane Impeller
- Motor Service Factor 1.20

M4VP - 4" Discharge



Features and Benefits

- Watertight Cable Entrance
- Strong Motor (U.S. Motor Manufacturer)
- Solid 2-Bearing Support Rated for 100,000 hour B-10 life.
- Severe Duty Dual Mechanical Seals
- Moisture Detection
- High Efficiency Hydraulic Design
- 4" Horizontal Standard Flange Connection
- High Performance Wear Ring

Capabilities:

- Flows to 1150 GPM
- Heads to 110 Feet
- 3 - 20 HP Range
- Voltage Options
 - 208 / 230 Volt, 1-Phase
 - 208 / 230 / 460 / 575 Volt, 3-Phase
- 4" ANSI Class 125 Horizontal Flange
- Motor Speed 1150 / 1750 rpm
- Solids Handling 3"
- Balanced, Enclosed, 2-Vane Impeller
- Motor Service Factor 1.20

M4RN



Recessed Impeller

- Handles Stringy and Fibrous Materials
- Passes Large Solids
- Pumps Heavier Solids Concentrations
- Ideal for Grit and Abrasive Solids
- Pumping via Vortex Action
- Solids Do Not Pass through Impeller
- Virtually Impossible to Clog

Strong Performance

- Ideal for Higher heads, Lower flows
- Operate to Shut-off Head without Damage
- Non-overloading Performance Curve

Long Service Life

- Dual Silicon Carbide Shaft Seals
- Low Motor Operation Temperatures
- Continuously Lubricated Bearings
- Premium 3-Bearing Construction
- Epoxy Potted Cord Entry

Low Maintenance

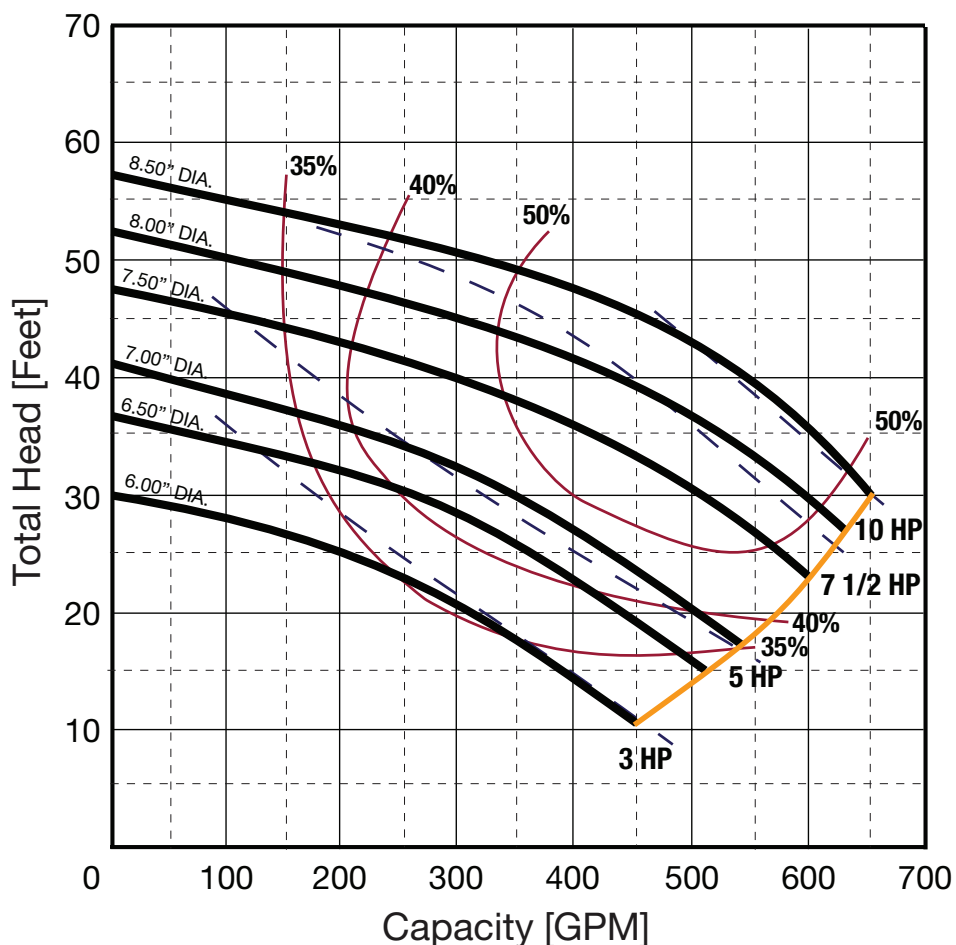
- No Wear Components
- Recessed Impeller out of Passageway
- Grit-Resistant Silicon Carbide Shaft Seals

Capabilities

- Flows to 650 GPM
- Heads to 57 Feet
- 3 - 10 HP Range
- Voltage / Phase Options
 - 208 / 230 Volt 1-Phase
 - 208 / 230 / 460 Volt, 3-Phase
- ANSI Class 125 Horizontal Flange Discharge Connection
- Motor Speeds 1150 / 1750 RPM
- Solids-Handling 3"
- Balanced, Enclosed, 2-Vane Impeller
- Motor Service Factor 1.20

Features and Benefits

- Watertight Cable Entrance
- Strong Motor (U.S. Motor Manufacturer)
- Solid 3-Bearing Support Rated for 100,000 hour B-10 life.
- Severe Duty Dual Mechanical Seals
- Moisture Detection
- High Efficiency Hydraulic Design
- 3" Solids Handling
- Standard Flange Connection
- Available in dry pit configuration



M4R Series

Recessed Impeller

- Handles Stringy and Fibrous Materials
- Passes Large Solids
- Pumps Heavier Solids Concentrations
- Ideal for Grit and Abrasive Solids
- Pumping via Vortex Action
- Solids Do Not Pass through Impeller
- Virtually Impossible to Clog

Long Service Life

- Dual Silicon Carbide Shaft Seals
- Low Motor Operation Temperatures
- Continuously Lubricated Bearings
- Premium 3-Bearing Construction
- Epoxy Potted Cord Entry

Low Maintenance

- No Wear Components
- Recessed Impeller out of Passageway
- Grit-Resistant Silicon Carbide Shaft Seals

Strong Performance

- Ideal for Higher heads, Lower flows
- Operate to Shut-off Head without Damage
- Non-overloading Performance Curve

Options Available

- Flows to 1,400 GPM
- Up to 60 HP
- Available in dry pit configuration

M4RH - 4" Discharge



Features and Benefits

- Watertight Cable Entrance
- Strong Motor
- 3-Bearing Support Rated for 100,000 hour B-10 life.
- Severe Duty Dual Mechanical Seals
- Moisture Detection
- Non-Overloading Hydraulic Design
- 3" Solids Handling
- Standard Flange Connection

Capabilities:

- Flows to 510 GPM
- Heads to 93 Feet
- 7.5 - 15 HP Range
- Voltage Options
 - 208 / 230 Volt, 1-Phase
 - 208 / 230 / 460 Volt, 3-Phase
- 4" ANSI Class 125 Horizontal Flange
- Motor Speed 3450 rpm
- Solids Handling 3"
- Recessed, Vortex Impeller
- Motor Service Factor 1.20

M4RP - 4" Discharge



Features and Benefits

- Watertight Cable Entrance
- Strong Motor (U.S. Motor Manufacturer)
- Solid Bearing Support Rated for 100,000 hour B-10 life.
- Severe Duty Dual Mechanical Seals
- Moisture Detection
- Non-Overloading Hydraulic Design
- 3" Solids Handling
- Standard Flange Connection

Capabilities:

- Flows to 800 GPM
- Heads to 125 Feet
- 3 - 20 HP Range
- Voltage Options
 - 208 / 230 Volt, 1-Phase
 - 208 / 230 / 460 / 575 Volt, 3-Phase
- 4" ANSI Class 125 Horizontal Flange
- Motor Speed 1150 / 1750 / 3450 rpm
- Solids Handling 3"
- Recessed, Vortex Impeller
- Motor Service Factor 1.20

COMPLETE TURNKEY PACKAGES

- **AK Industries Fiberglass Basin**
- **Completely Assembled**
- **Quick & Simple Field Installation**
- **Saves Time & Money**
- **Fast Shipping Time - With Many in Stock**
- **Custom Built to Your Requirements**



STANDARD BASINS

- Diameters to 96"
- Lengths to 240"
- Custom Sizes Available

SYSTEMS

- Fiberglass Basins
- Complete Simplex
- Complete Duplex
- Custom Basins

PACKAGES

- Pumps
- Controls
- Junction Box
- Floats
- Rail System
- Piping

In-Stock Basins - Complete with Rails

- Ships Same Day
- 30" X 72"
- 30" X 96"



EOR

Turnkey Replacement Package

The **MDI** Advantages:

- Fully Assembled
- Fits into Existing System No Changes
 - Lower Into Place
 - Latch Arm Over Pipe
 - Plug Connector In
- Eliminates Existing Problems
- Heads to 250 feet
- Operates With Same Control Panel
- Better Pump Performance More Flow
- Reduces Service Maintenance Issues

EOR-WTB-F(E) - (Extreme Plug)

CPGH2023DS 2 HP Dual Seal Grinder Pump

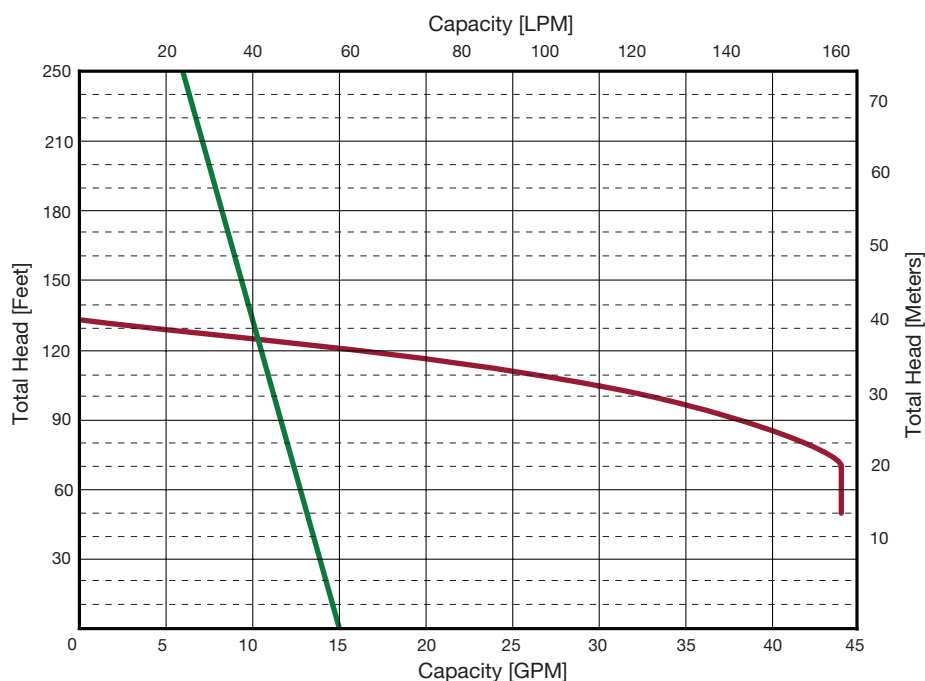
The vortex impeller design of the pump provides non-overloading performance and prevents clogging over the entire performance curve and produces capacities to 42 gpm with heads to 133 feet.

For more detail see page 14

EOR-PC-(E) - (Extreme Plug)

KPCG-21CTSL Progressive Cavity Pump

The progressive cavity design provides the most reliable and longest service life on the market. The pump produces capacities to 15 gpm with heads to 250 feet.



E/One® brand name or trademark are the property of Environment One Corporation and are referred to for descriptive purposes only.

2 HP Grinder Pump Package

Turnkey Replacement Package Fully Assembled



The MDI advantages:

- Fits into Existing System - No Modifications
- Simple and Fast Installation - Just Lower Into Place
- Operates with same Control Panel
- Eliminates Existing Problems
- Superior Pump Performance - More Flow
- Reduces Service/Maintenance Issues
- Reliable Operation
- Saves up to 20% on energy costs

The Barnes Retrofit works with any of our 2 HP grinder pumps. Just add BR to the beginning of the part number

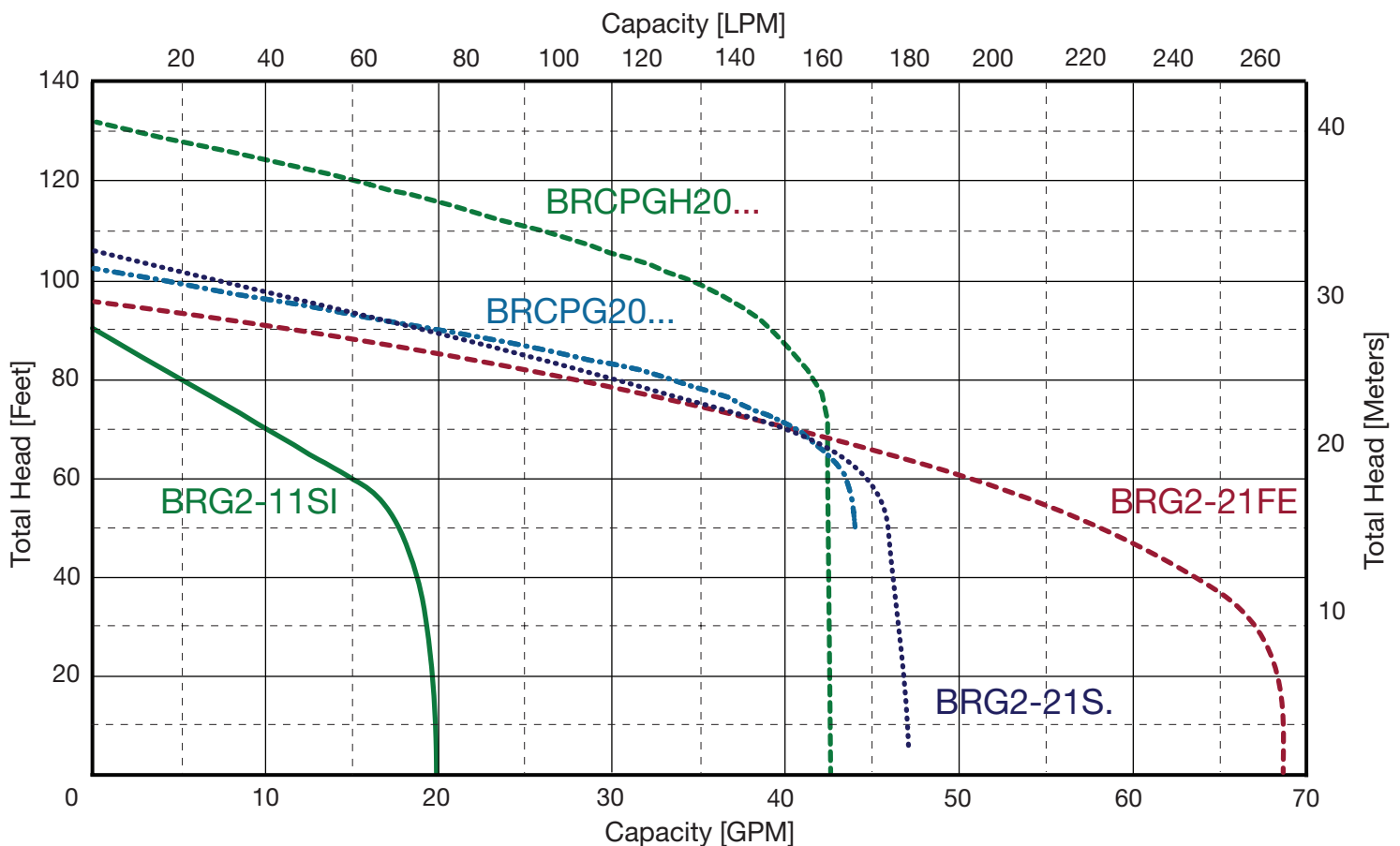
For detailed specs please refer to any of the following:

For Champion Pump specs (See Page 14)

Champion Pump BRCPG2023DSL

For MDI Pump specs (See Page 15)

Ex. MDI Pump BRG2-21SI



5 HP Grinder Pump Package



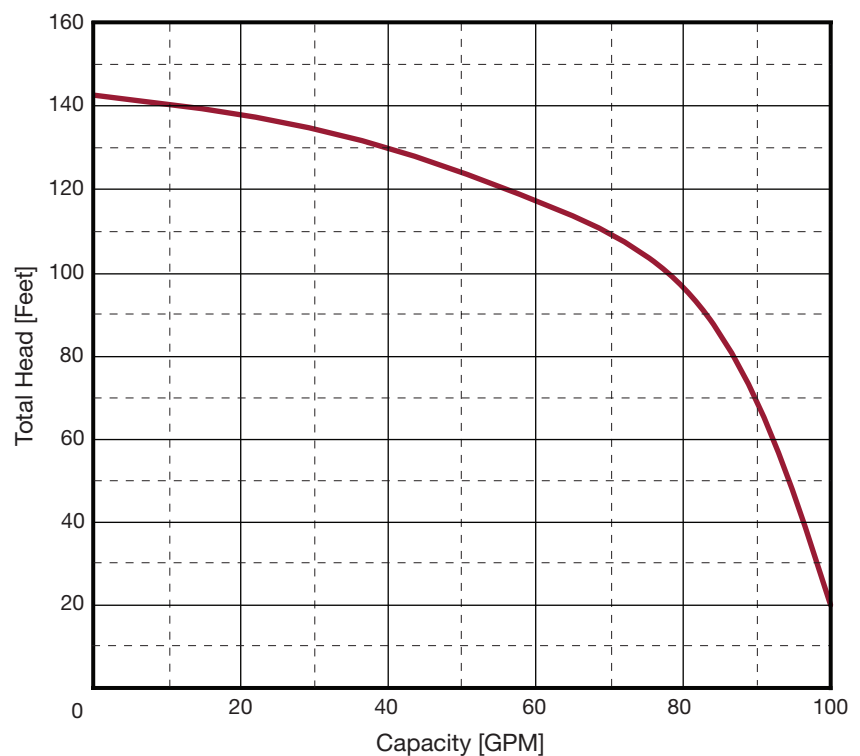
Turnkey Replacement Package
Fully Assembled
Simple Fast Installation
Just lower into place!

The MDI advantages:

- No Modifications - Fits into Existing System
- Eliminates Existing Problems
- Superior Pump Performance - More Flow
- Reduces Service/Maintenance Issues
- Saves Money!
- Operates with same Control Panel
- Reliable Operation

Pump Specifications: BRG5-21HE 5 HP Dual Seal Grinder High Flow Pump External Start Components - High Flow

The G5-21HE series pump features:
Strong Class F 5 HP motor, 208 / 230 Volt, 1-phase
3 support bearings (upper / lower ball, sleeve)
Dual mechanical seals (silicon carbide)
Internal moisture protection



The MDI BRG5-21HE series centrifugal grinder pumps easily handle residential, light commercial or industrial sanitary waste, reducing it to fine slurry. The BRG5-21HE pump is designed for use in pressure sewer applications or any piping network.

The recessed vortex impeller design of the BRG5-21HE grinder pump provides trouble free, non-overloading operation over the entire performance curve.

The modular design provides quick and easy serviceability. The hardened stainless steel grinder assembly provides many years of dependable operation.

Base Elbows



- All 100% Stainless Steel
- Kits Available
- High Quality - Made to Last

Base Elbow Assemblies (Non-Sparking) - Includes Lightout Flange, Pump Adapter, and Stainless Steel Hardware

FPBEA125(X)	1-1/4" Base Elbow - Standard (Non-Sparking)
FPBEA150(X)	1-1/2" Base Elbow - Standard (Non-Sparking)
FPBEA200(X)	2" Base Elbow - Standard (Non-Sparking)
FPBEA125CV(X)	1-1/4" Base Elbow - Check Valve (Non-Sparking)
FPBEA150CV(X)	1-1/2" Base Elbow - Check Valve (Non-Sparking)
FPBEA200CV(X)	2" Base Elbow - Check Valve (Non-Sparking)
FPBEA300V(X)	3" Vertical Base Elbow, Complete with 3" NPT Discharge Elbow (Non-Sparking)
FPBEA320V(X)	2" X 3" Vertical Base Elbow, Complete with 3" NPT Discharge Elbow (Non-Sparking)
FPBEA300VF(X)	3" Vertical Base Elbow, Complete with 3" ANSI Flanged Discharge Elbow (Non-Sparking)
FPBEA320VF(X)	2" X 3" Vertical Base Elbow, Complete with 3" ANSI Flanged Discharge Elbow (Non-Sparking)
FPBEA300H(X)	2-1/2" & 3" Horizontal Base Elbow, Complete with 3" NPT Discharge Elbow (Non-Sparking)
FPBEA300HF(X)	2-1/2" & 3" Horizontal Base Elbow, Complete with 3" ANSI Flanged Discharge Elbow (Non-Sparking)
FPBEA300HFLR(X)	2-1/2" & 3" Horizontal Base Elbow, Complete with 3" Long Radius ANSI Flanged Discharge Elbow (Non-Sparking)
FPBEA340HF(X)	2-1/2" & 3" Horizontal Base Elbow, Complete with 4" ANSI Flanged Discharge Elbow (Non-Sparking)
FPBEA400(X)	4" Base Elbow - Flyght Compatible - 3" & 4" ANSI Double Tapped Flange (Non-Sparking)
FPBEA600(X)	6" Base Elbow - Flyght Compatible (Non-Sparking)
FPBEA640	4" X 6" Base Elbow - Flyght Compatible

Lift-Out Flanges



- All 100% Stainless Steel
- Kits Available
- High Quality - Made to Last

Replacement Lift-Out Flange (Non-Sparking) - No Elbow Included, Will Adapter to Most Existing Rail Systems

FPPF125(X)	1-1/4" Lift-Out Flange - Standard - Includes Pump Adapter Nipple (Non-Sparking)
FPPF150(X)	1-1/2" Lift-Out Flange - Standard - Includes Pump Adapter Nipple (Non-Sparking)
FPPF200(X)	2" Lift-Out Flange - Standard - Includes Pump Adapter Nipple (Non-Sparking)
FPPF125CV(X)	1-1/4" Lift-Out Flange - Check Valve - Includes Pump Adapter Nipple (Non-Sparking)
FPPF150CV(X)	1-1/2" Lift-Out Flange - Check Valve - Includes Pump Adapter Nipple (Non-Sparking)
FPPF200CV(X)	2" Lift-Out Flange - Check Valve - Includes Pump Adapter Nipple (Non-Sparking)
FPPF300V(X)	3" Lift-Out Flange - Accepts 3" Vertical Discharge Pumps - Includes Pump Adapter Nipple (Non-Sparking)
FPPF320V(X)	2" X 3" Lift-Out Flange - Accepts 2" Vertical Discharge Pumps - Includes Pump Adapter Nipple (Non-Sparking)
FPPF300H(X)	2-1/2" & 3" Lift-Out Flange - Accepts 2-1/2" & 3" Vertical Discharge Pumps - Includes Pump Adapter Nipple (Non-Sparking)
FPPF400(X)	4" Lift-Out Flange - Flyght Compatible - 3" & 4" ANSI Double Tapped Flange (Non-Sparking)
FPPF600(X)	6" Lift-Out Flange - Flyght Compatible (Non-Sparking)
FPPF640	4" X 6" Lift-Out Flange - Flyght Compatible - 4" & 6" ANSI Double Tapped Flange

Chains



- Chains Can Order Per Foot or by Spool
- Chain and Shackle Kits - The Standard Length is 10' but Chain Length and Number of Shackles can be Added When Ordering

Chain Grabber - 1/2" Thick Type 304 Stainless Steel
FPGRAB Lifts all chain sizes 1/8" to 3/8"

Chain - Type 316 Stainless Steel (Not for Over Head Lifting)

FPSS18	1/8" Stainless Steel Chain - 375 lb SWL
FPSS316	3/16" Stainless Steel Chain - 800 lb SWL
FPSS14	1/4" Stainless Steel Chain - 1,400 lb SWL
FPSS516	5/16" Stainless Steel Chain - 1,800 lb SWL
FPSS38	3/8" Stainless Steel Chain - 2,800 lb SWL
FPSS12	1/2" Stainless Steel Chain - 4,500 lb SWL

Chain and Shackle Kits - Custom Kits Can Be Made Any Length and Number of Shackles

FPSS316K	3/16" Chain and 1/4" Shackles
FPSS14K	1/4" Chain and 5/16" Shackles
FPSS516K	5/16" Chain and 3/8" Shackles
FPSS38K	3/8" Chain and 1/2" Shackles
FPSS12K	1/2" Chain and 5/8" Shackles

Shackles and Quick Links



Shackles - Type 316 Stainless Steel

FPSS18SHACK	3/16" Stainless Steel Chain - 660 lb SWL
FPSS316SHACK	1/4" Stainless Steel Chain - 700 lb SWL
FPSS14SHACK	5/16" Stainless Steel Chain - 1,000 lb SWL
FPSS516SHACK	3/8" Stainless Steel Chain - 1,500 lb SWL
FPSS38SHACK	1/2" Stainless Steel Chain - 3,000 lb SWL
FPSS12SHACK	5/8" Stainless Steel Chain - 4,000 lb SWL



Quick Links - Type 316 Stainless Steel

FPQL14	1/4" Stainless Steel Quick Link - 800 lb SWL
FPQL516	5/16" Stainless Steel Quick Link - 1,700 lb SWL
FPQL38	3/8" Stainless Steel Quick Link - 2,200 lb SWL
FPQL12	1/2" Stainless Steel Quick Link - 3,300 lb SWL

Eye Bolts and Pull-Out Kits



Eye Bolts - Type-304 Stainless Steel

FPEB516	5/16" Eye Bolt for Any 1-1/4", 1-1/2" & 2" Lift-Out Flange
FPEB38	3/8" Eye Bolt for Any 3" Lift-Out Flange
FPEB12	1/2" Eye Bolt for Any 4" & 6" Lift-Out Flange

Pull-Out Kits - Complete With Type 304 Stainless Steel Hardware and Red Rubber Gasket

FPPK300	3" Hardware and Gasket Kit
FPPK400	4" Hardware and Gasket Kit
FPPK600	6" Hardware and Gasket Kit
FPPK800	8" Hardware and Gasket Kit

Tank Vents



Tank Vents - Weather Proof, Bug Proof, Powder Coated or Stainless Steel for Corrosion Resistance

FPTV2	2" Tank Vent - Green Powder Coat Finish
FPTV2SS	2" Tank Vent - Type 304 Stainless Steel
FPTV3	3" Tank Vent - Green Powder Coat Finish
FPTV4	4" Tank Vent - Green Powder Coat Finish
FPTV2K	2" Tank Vent Kit - Included Tank Vent, Close Nipple and Mounting Flange
FPTV2SSK	2" Stainless Steel Tank Vent Kit - Included Tank Vent, Close Nipple and Mounting Flange
FPTV3K	3" Tank Vent Kit - Included Tank Vent, Close Nipple and Mounting Flange
FPTV4K	4" Tank Vent Kit - Included Tank Vent, Close Nipple and Mounting Flange

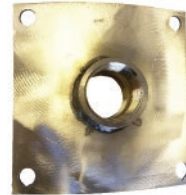
Close Nipples - Schedule 80 PVC

FPCN2	2" Close Nipple
FPCN3	3" Close Nipple
FPCN4	4" Close Nipple

Fiberglass Mounting Flange - Plastic Reinforce Fiberglass, UV Resistant

FPFF2	2" Mounting Flange
FPFF3	3" Mounting Flange
FPFF4	4" Mounting Flange

Inlet Hubs and Full Couplings



Inlet Hubs - Includes Stainless Steel Mounting Hardware and Gasket Tape

FPIH400	4" Cast Iron Inlet Hub
FPIH600	6" Cast Iron Inlet Hub

Full Couplings - Includes Stainless Steel Mounting Hardware and Gasket Tape

FPSFC125	1-1/4" Stainless Steel Full Coupling
FPSFC200	2" Stainless Steel Full Coupling
FPPFC125	1-1/4" Plastic Full Coupling
FPPFC150	1-1/2" Plastic Full Coupling
FPPFC200	2" Plastic Full Coupling

Junction Boxes



Junction Boxes - Built To Order, Can Be Custom to Any Specifications

FPJB44	4"x4" Simplex Junction Box
FPJB66	6"x6" Duplex Junction Box
FPJB88	8"x8" Duplex Junction Box with Heat and Seal Sensors

Basin Accessories (Continued)

Guide Brackets



Upper Guide Brackets - Made From Type-304 Stainless Steel. Type-316 Stainless Steel or Custom Designs Available

FPUBS	3-Tier Step Grommet for 3/4", 1", & 1-1/4" Guide Rails with 7" Spacing
FPUGB075-FLYGT	Upper Bracket for 3/4" Guide Rails with 1-7/16" Rail Spacing (Flygt Compatible)
FPTRS-100	Upper Bracket for 1" Guide Rails with 7" Rail Spacing (TRS Equivalent)
F PUB150	Upper Bracket for 1-1/2" Guide Rails with 4" Rail Spacing
FPTRS-150	Upper Bracket for 1-1/2" Guide Rails with 6-1/2" Rail Spacing (TRS Equivalent)
F PUB200	Upper Bracket for 2" Guide Rails with 4" Rail Spacing (Flygt Compatible)
FPTRS-200	Upper Bracket for 2" Guide Rails with 9-1/2" Rail Spacing (TRS Equivalent)
F PUB300	Upper Bracket for 3" Guide Rails with 5 Rail Spacing (Flygt Compatible)



Intermediate Guide Brackets - Made From Type-304 Stainless Steel. Type-316 Stainless Steel or Custom Designs Available

FPIGB075-FLYGT	Intermediate Bracket for 3/4" Guide Rails with 1-7/16" Rail Spacing (Flygt Compatible)
FPIB075	Intermediate Bracket for 3/4" Guide Rails with 7" Rail Spacing
FPIB100	Intermediate Bracket for 1" Guide Rails with 7" Rail Spacing
FPIB125	Intermediate Bracket for 1-1/4" Guide Rails with 7" Rail Spacing
FPIB150-4	Intermediate Bracket for 1-1/2" Guide Rails with 4" Rail Spacing - Includes 4" U-Bolt
FPIB200-4	Intermediate Bracket for 2" Guide Rails with 4" Rail Spacing - Includes 4" U-Bolt (Flygt Compatible)
FPIB200-6	Intermediate Bracket for 2" Guide Rails with 6" Rail Spacing - Includes 6" U-Bolt (Flygt Compatible)
FPIB200-8	Intermediate Bracket for 2" Guide Rails with 8" Rail Spacing - Includes 8" U-Bolt (Flygt Compatible)

Float Accessories



Chain Anchor Kits - Custom Kits Can Be Made Any Length and Number of Shackles or Float Clamps

FPAKCH10-3	Anchor Kit 10' of 3/16" Chain, (2) 1/4" Shackles, (3) Stainless Steel Float Clamps & a 10 lb Anchor
FPAKCH10-4	Anchor Kit 10' of 3/16" Chain, (2) 1/4" Shackles, (4) Stainless Steel Float Clamps & a 10 lb Anchor
FPMA10	10 lb Mushroom Anchor
FPMA15	15 lb Mushroom Anchor



Float Brackets - Made from Type 304 Stainless Steel (Type 316 Stainless Steel and Custom Bracket Available)

FPLB3	3-Hole L-Type Bracket	FPHUB3	3-Hole U-Type Bracket
FPLB4	4-Hole L-Type Bracket	FPHUB4	4-Hole U-Type Bracket
FPTB4	4-Hole T-Type Bracket	FPHUB6	6-Hole U-Type Bracket
FPTBH4	4-Hole T-Type Bracket with Hooks	FPEBH	Float Bracket Holder
FPTB6	6-Hole T-Type Bracket	FPSNUB	Plastic Cord Snub
FPTBH6	6-Hole T-Type Bracket with Hooks		(Included With All Holed Brackets)

WARRANTY

MDI Inc; warrants it's products to be free from defects in material or workmanship (length varies depending on product), and will replace any units with such defects. Warranty is void if units are improperly applied. All repairs are to be done by MDI in their facility. The purchaser is responsible for pump removal and re-installation. MDI Inc. shall not be liable for any consequential, incidental, or contingent damages whatsoever. The forgoing Warranty is exclusive to MDI products and in lieu of all other express or implied Warranties, including but not limited to the implied Warranties of merchantability and fitness for a particular purpose.



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