



Submersible heavy-duty pumps for use in gassy mines or tunnels.  
Approved by MSHA.



**Dewatering pumps:**

- Minex MSHA
- Minette MSHA
- Minor MSHA
- Major MSHA
- Master MSHA
- Matador MSHA

**Sludge pumps:**

- Salvador MSHA
- Sandy MSHA

60 Hz

## Translating user requirements into product features

After some 50 years of designing and manufacturing submersible electrical pumps and listening to the customers, Grindex now offers a completely new generation of MSHA approved dewatering and sludge pumps.

The eight new pumps in the range have an output of 2-27 HP and are intended for use in gassy mines or tunnels. The new pumps are designed to dramatically reduce operational costs. They offer all the reliability you have come to expect from Grindex pumps.

### On top of that, we have added some new features:

- New hydraulic design:
  - Several solutions that minimize wear, makes the pumps at least three times more wear resistant.
- Fewer components:
  - Makes inspection and service faster, easier and less expensive.
- Ergonomic design:
  - Simplifies the pump handling.

### Grindex – Trouble-free dewatering

#### TECHNICAL DATA

##### Classification

Electrical submersible pump. Protection class: IP68

##### Electrical motor

Squirrel cage induction motor. Insulation class H (IEC 85)

##### Motor protector

Thermal contacts in the stator opening at 284°F

##### Power cable

SUBCAB, 50 ft standard length

##### Shaft seals

Cartridge seal with double mechanical shaft seals with oil compartment between the seals

Material lower seal: Tungsten carbide –Tungsten carbide

Material upper seal: Tungsten carbide – ceramic  
(Minex, Minette, Salvador)

Tungsten carbide – tungsten carbide  
(Minor, Major, Master, Matador, Sandy)

##### Bearings

Ball bearing with C3 clearance

##### Materials

Casted parts: Aluminium

Outer casing: Stainless steel

Stator housing: Stainless steel (Minex, Minette, Salvador)

Aluminum (Minor, Major, Master, Sandy)

Cast iron (Matador)

Motor shaft: Stainless steel

Impeller: High chrome alloyed cast iron

Suction cover: High chrome alloyed cast iron

Diffusers: Nitrile rubber

Screws and nuts: Stainless steel

O-rings: Nitrile rubber

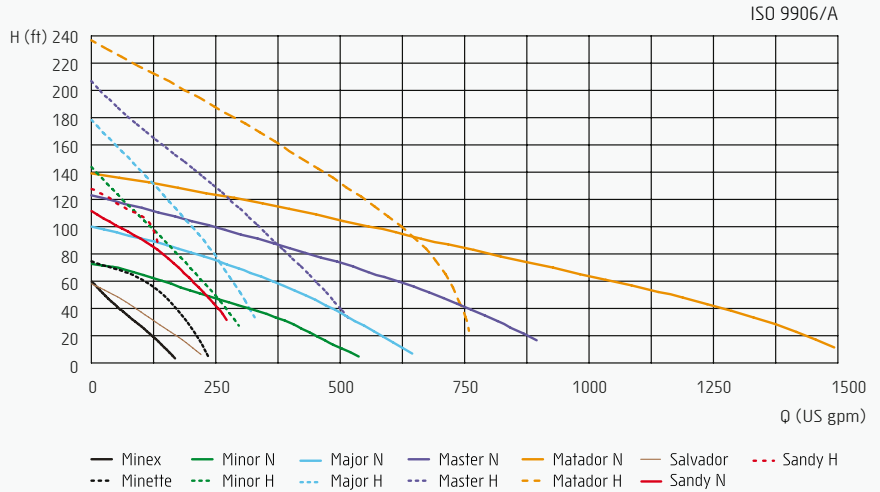
##### Limitations

Max. submersion depth: 66ft

Max. liquid temperature: 104°F

Max. liquid density: 68 lbs/ft<sup>3</sup>

pH of the liquid: 5-8



Technical data	Minex	Minette	Minor	Major	Master	Matador	Salvador	Sandy
Discharge connection	2"	3"	3-4"	3-4"	4-6"	4-6"	3"	3"
Rated output	2.0 HP	3.5 HP	6.2 HP	8.8 HP	15 HP	27 HP	3.5 HP	8.9 HP
Diameter x Height	7.7" x 25.8"	9.5" x 27"	11.3" x 31.2"	11.3" x 31.2"	13.6" x 32.8"	15.5" x 37.6"	14.8" x 30.1"	18.9" x 34.6"
Weight	43 lbs	71 lbs	115 lbs	119 lbs	176 lbs	315 lbs	75 lbs	126 lbs