

Sump Pumps



Model Numbers:
DT37KZN, DT55KZN,
DT75KZN, DT110KZN,
DT150KZN, DT220KZN



HEAVY DUTY SLUDGE/SLURRY DEWATERING PUMP

APPLICATION

Ideal for ground and nuisance water removal, drainage from dams, sewer systems, tunnels, river improvement projects and construction sites and pumping of muddy liquid generated from industrial projects.

FEATURES & BENEFITS

Corrosion resistant 410 stainless steel shaft and stainless steel shaft sleeve

- Long service life
- Impact resistant and long lasting
- Easily replaceable shaft sleeves save on shaft wear

Multivane, semi-open, wear resistant, high chrome impeller

- Ability to handle abrasive solid concentrations up to 70% by weight

Pumps have a heavy duty high chrome agitator

- Keeps the flow chamber and impeller clear by causing the solids to move in suspension, preventing the pump from clogging

Double silicon carbide mechanical seals

- Abrasion resistant
- Located in separate oil chamber to protect the motor
- Added protection of a heavy duty lip seal

Top discharge with a motor water jacket

- Slimline design reduces the chance of damage to the outlet in transit
- Allows for pumping within inches of the bottom, without risk of overheating

Hardened ductile iron volute

- Cast with extra thick walls (300 Brinnell hardness) is twice as abrasive resistant as standard ductile cast iron, which ensures greater durability

Replaceable wear plate

- Hardened surface on suction side inhibits the occurrence of erosion that could cause a reduction in pump performance

Large open strainer

- Protects from larger solids entering the pump

Lifting rings

- For easy lifting and transportation of the pump

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OPERATING LIMITS

Capacities to	6250 lpm (375m ³ /hr)
Maximum total head	36m
Maximum submergence	15m
Maximum pumped water temperature	40° C

MATERIALS OF CONSTRUCTION

PART	MATERIAL
Motor Top and Shell	FC200 cast iron
Pump body	FCD450 hardened ductile iron
Suction cover	High (23%) chrome iron
Agitator	High (23%) chrome iron
Discharge outlet	FC200 cast iron
Strainer	Steel
Impeller	High (23%) chrome iron
Lip seal	Nitrile
Pump shaft	410 stainless steel
Mechanical seals	Dual silicone carbide
Seal and bottom bearing housing	FC200 cast iron
Fasteners and plugs	304SS
Power supply leads	HO7RNF

ELECTRICAL DATA

Supply voltage	380-415V / 50Hz / 3 phase					
Cable length (m)	20m					
Speed (rpm)	1450					
Insulation class	H					
IP rating	x8					
Starting	DOL					
Motor kW size (P ₂)	3.7	5.5	7.5	11.0	15.0	22.0
Input kW size (P ₁)	4.4	6.9	9.75	14.0	17.6	26.4
Start Amps	50	63	73	103	134	182
Run Amps	8	11.5	15.7	29.9	36.5	45.5

SUITABLE FLUIDS

Water containing soft solids and/or hard solids in suspension, up to 70% by weight. Some wear should be expected with hard solid pumping. Not suitable for explosive or flammable materials or fluids.

DIMENSIONS (mm)

Model	Motor (P ₂) (kW / HP)	Discharge Port	Maximum Solids (mm)	Weight (kg)	L (mm)	W (mm)	H (mm)
DT37KZN	3.7 / 5	3"	20	130	420	410	820
DT55KZN-H	5.5 / 7.5	3"	25	150	420	410	820
DT55KZN	5.5 / 7.5	4"	25	150	420	410	820
DT75KZN-H	7.5 / 10	4"	25	180	420	410	840
DT75KZN	7.5 / 10	4"	25	180	420	410	840
DT110KZN-H	11 / 15	4"	35	245	565	485	1100
DT110KZN	11 / 15	6"	35	245	565	485	1100
DT150KZN	15 / 20	6"	35	265	565	485	1100
DT150KZN-L	15 / 20	6"	35	265	565	485	1100
DT220KZN	22 / 30	6"	35	410	578	543	1325
DT220KZN-L	22 / 30	6"	35	410	578	543	1325

