**Type EUK & EUKZ** 



# **Submersible Dewatering Pump**

### **APPLICATIONS**

- Civil engineering and construction
- Drainage at civil engineering work and building construction site
- Drainage from manhole pit and tunnel pit
- Drainage of rain water and spring water from ground
- Drainage from civil engineering work at river

# **FEATURES**

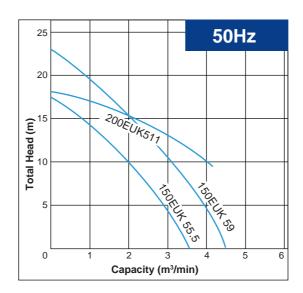
- By employing 4 pole driven motor, higher efficiency at large water flow and higher resistance against wear. Then, running cost and maintenance cost would be reduced.
- Simple and high efficiency design pursuing energy saving and easier maintenance which are required for the pump for civil engineering work.
- Built-in motor protector prevents motor from burn-out by excessive load/restraint/open phase operation.
- EUKZ (with stirring impeller) reduces sedimentation of earth and sand inside of suction strainer.



Quality . Value . Performan

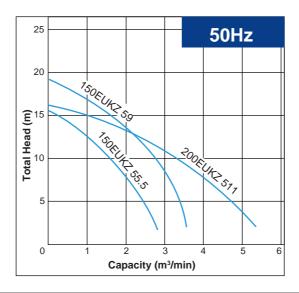
# PERFORMANCE CURVE

# **EUK**



| Model      | Nominal diameter | Output | Ph/Hz/V   | Total Head | Capacity | Outer dimension | Weight |      |
|------------|------------------|--------|-----------|------------|----------|-----------------|--------|------|
| 50Hz       | (mm)             | (kW)   |           | (m)        | (m³/min) | Max. diameter   | Height | (kg) |
| 150EUK55.5 | 150              | 5.5    |           | 10         | 2.0      | 460             | 750    | 124  |
| 150EUK59   | 150              | 9      | 3Ph/50Hz/ | 16         | 2.0      | 541             | 810    | 180  |
| 200EUK511  | 200              | 11     | 380-415   | 10         | 4.0      | 545             | 850    | 200  |

**EUKZ** 



| Model       | Nominal diameter | Output | Ph/Hz/V              | Total Head | Capacity | Outer dimensi | Weight |      |  |
|-------------|------------------|--------|----------------------|------------|----------|---------------|--------|------|--|
| 50Hz        | (mm)             | (kW)   | Ph/HZ/V              | (m)        | (m³/min) | Max. diameter | Height | (kg) |  |
| 150EUKZ55.5 | 150              | 5.5    |                      | 10         | 1.5      | 460           | 750    | 129  |  |
| 150EUKZ59   | 150              | 9      | 3Ph/50Hz/<br>380-415 | 14         | 2.0      | 541           | 810    | 185  |  |
| 200EUKZ511  | 200              | 11     | 300-415              | 8          | 4.0      | 545           | 850    | 205  |  |

# **SPECIFICATIONS**

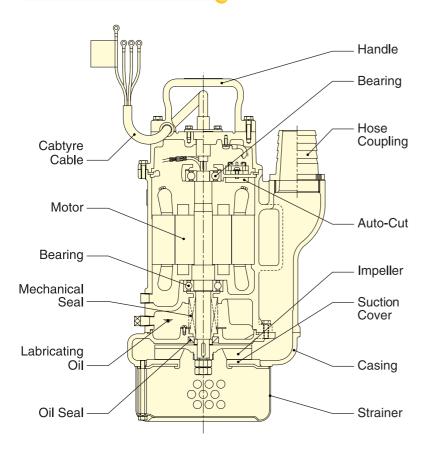
| Item           |                                  |                                 | kW          | Size 150, 5.5kW                              | Size 150, 9kW                           | Size 200, 11kW |  |  |  |  |
|----------------|----------------------------------|---------------------------------|-------------|--|---|----------------|--|--|--|--|
| p              | Liquid (Note 1)                  |                                 |             | Spring water from ground, Earth & sand water |   |                |  |  |  |  |
| ndle           | Diameter of solid matt           | er                              |             | 20mm and below                               |   |                |  |  |  |  |
| hai            | Density of earth/sand            |                                 |             | 2% and below (volume)                        |   |                |  |  |  |  |
| Liquid handled | Liquid temperature               |                                 |             | 0 - 40°C                                     |   |                |  |  |  |  |
| Li             | рН                               |                                 |             | 6.5 - 8.0                                    |   |                |  |  |  |  |
| Max. pu        | mp submergence                   |                                 |             | 30m  |   |                |  |  |  |  |
|                |                                  | Impeller                        |             | Semi-open                                    |   |                |  |  |  |  |
|                | Construction                     | Shaft seal                      |             | Double mechanical seal                       |   |                |  |  |  |  |
|                |                                  | Bearings                        |             | Sealed ball bearings                         |   |                |  |  |  |  |
|                |                                  | Impeller                        |             | FCD700                                       |   |                |  |  |  |  |
| du             | Material                         | Casing                          |             | FC250  |   |                |  |  |  |  |
| Pump           |                                  | Stirring impeller (EUKZ)        |             | High crome cast iron                         |   |                |  |  |  |  |
|                |                                  | Shaft seal<br>(Mechanical seal) | Motor side  | SiC/SiC                                      |   |                |  |  |  |  |
|                |                                  |                                 | Liquid side | SiC/SiC                                      |   |                |  |  |  |  |
|                |                                  |                                 | Elastomer   | NBR  |   |                |  |  |  |  |
|                |                                  | Sealed liquid at shaft seal     |             | Turbine oil VG32                             |   |                |  |  |  |  |
| 2) (Note 3)    | ົຕີ Type, Pole, Insulation class |                                 |             | Dry type submersible,<br>4pole, class B      | Dry type submersible, 4pole,<br>class F |                |  |  |  |  |
| N) (Ne         | Phase, Voltage                   |                                 |             | Three phase, 380-415V                        |   |                |  |  |  |  |
| (Note 2        | Built-in ptotector               |                                 |             | Auto-cut                                     |   |                |  |  |  |  |
| (Nc            | Material                         | Frame                           |             | FC200  |   |                |  |  |  |  |
| Ŀ              |                                  | Shaft                           |             | SUS420J1                                     |   |                |  |  |  |  |
| Motor          |                                  | Cable                           |             | 2PNCT 2PNCT (with cloth for reinforcement)   |   |                |  |  |  |  |
|                | Cooling method                   |                                 |             | Semi-inner type                              |   |                |  |  |  |  |
| Type of        | Type of connection               |                                 |             | Hose coupling or flange                      |   |                |  |  |  |  |

Note 1: Do not apply for oil, sea water, organic solvent etc. Pump may be damaged, and may cause electric leakage and electric shock.

Note 2: Inverter drive shall not be applicable for motor with auto-cut. Note 3: Voltage fluctuation 360<VOL≤420, Frequency fluctuation +/- 1% or less, Simultaneous fluctuation of voltage and frequency 10% or less for sum of

absolute value of both. However, in any case, motor characteristics and temprerature rise etc. shall not be in accordance with rated value. Remarks: 1. Do not install under environment of corrosive gas or volatile gas or steam.

# SECTIONAL VIEW



### **MOTOR PROTECTOR**

Auto-cut, recycling thermal protector is built-in to secure the protection of the motor against temperature rise due to clogging of the impeller, overload, dry-running, voltage drop, etc.

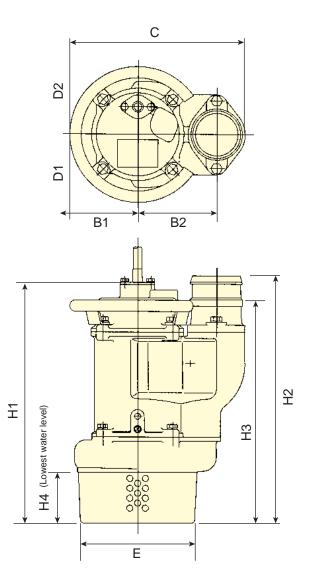
### SHAFT SEAL

The double mechanical seals cooled and lubricated in the oil bath system ensure reliable effect and steady service at heavy-duty work sites for a long period of time.

### **IMPELLER & CASING**

The impeller is precisely balanced and abrasion-resistant with a large channel to ensure free of clogging. Together with the hydro-mechanically well designed volute casing, the impeller will function to the great extent of pumping efficiency. The suction cover is rubber-lined, excellent wearing resistant to abrasive particles in water.

# DIMENSION



|                         |                |      |     |     |     |     |     |     |     |     | Unit : mm |
|-------------------------|----------------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----------|
| Model                   | Output<br>(kW) | Pump |     |     |     |     |     |     |     |     |           |
|                         |                | B1   | B2  | С   | D1  | D2  | H1  | H2  | H3  | H4  | E         |
| 150EUK55.5, 150EUKZ55.5 | 5.5            | 180  | 196 | 457 | 165 | 216 | 743 | 745 | 553 | 250 | Ø 316     |
| 150EUK59, 150EUKZ59     | 9              | 247  | 213 | 541 | 216 | 264 | 788 | 806 | 613 | 300 | Ø 400     |
| 200EUK511, 200EUKZ511   | 11             | 249  | 188 | 543 | 218 | 265 | 792 | 848 | 617 | 300 | Ø 400     |

\* Dimensional details are provided for reference only.

\* All specifications are subject to change without prior notice.



### EBARA Pumps Malaysia Sdn Bhd

6, Jalan TP3, UEP Subang Jaya Industrial Park, 47620 Subang Jaya, Selangor, Malaysia. **BARA** Tel : 03-8023 6622 Fax : 03-8023 9355 Email : sales@ebara.com.my Website : www.ebara.com.my



Certificate No. KLR 050008 Certificate No. KLR 602765

Authorised dealer: