**SPECIFICATIONS** 

Model

**GSZ-55-4** 

**GSZ-4-series** 

55kW, 3-phase

# Type of Pump

Submersible high head and high volume drainage pump for construction and foundation works, floodwater drainage, etc.

# Type of Fluid

Stormwater, groundwater, wash water, and sand-carrying water

Temperature: 0 to 40°C

# **Discharge Bore & Connection**

250mm, JIS 10kg/cm<sup>2</sup> Screwed Flange

# **Motor Output**

55kW

#### **Power Supply**

Three-phase

### **Starting Method**

Star-Delta

#### Motor

Continuous-duty rated, dry-type induction motor

Insulation Class: E

Degree of Protection: IP68

No. of Poles & Speed (Synchronous Speed)

4-pole, 1500/1800min<sup>-1</sup> (50/60Hz)

Power Supply Voltages & Rated Currents

50Hz 60Hz

380V - 114A 380V - 111A 400V - 108A 440V - 95A

415V - 105A

### **Power Cable**

Sheath: Chloroprene rubber Standard Length: 10m 200 to 600V supply:

/3 x 30mm<sup>2</sup>

1 x 1 x 14mm<sup>2</sup> O.D. 35.9mm

\2 x 2mm²/

 $1 \ x \ 3 \ x \ 30 mm^2$ , O.D. 35.9 mm

# Dry Weight (excluding cable)

1150kg

#### Impeller

Closed impeller made of high-chromium cast iron

Solids Passage 50Hz –  $\phi$ 25mm

60Hz - ∮25mm

# **Cable Entry with Anti-Wicking Block**

Watertight cable entry with strain-relief device. The antiwicking block prevents water incursion due to capillary action should the power cable be damaged or the end submerged.

**Bearing** 

Upper: Permanently lubricated, deep-groove,

double-shielded C3 ball bearing

Lower: Duplex angular contact ball bearing mounted

back-to-back

#### Shaft

420 stainless steel

#### Shaft Seal (Mechanical Seal)

Furnished with a double-face mechanical seal located in oil chamber. Both upper and lower seal faces always run in a clean environment.

Upper Seal Face: SiC + SiC Lower Seal Face: SiC + SiC

### **Pressure Relief Port**

Protects the mechanical seal from over rated limits, and also protects the seal faces from abrasive particles by drawing particles away.

#### **OIL LIFTER** (Patented)

Equipped in oil chamber. It forcibly supplies lubricating oil to the mechanical seal and continues to supply the oil to the upper seal faces even if lubricant falls below the rated volume.

Type of Lubricating Oil & Volume Turbine Oil (ISO VG32), 9400ml

#### **Motor Protection Device**

A miniature thermal protector is embedded in each winding of the motor. Should excessive heat builds up, the bimetal strip opens to cause the control panel to shut the power supply.

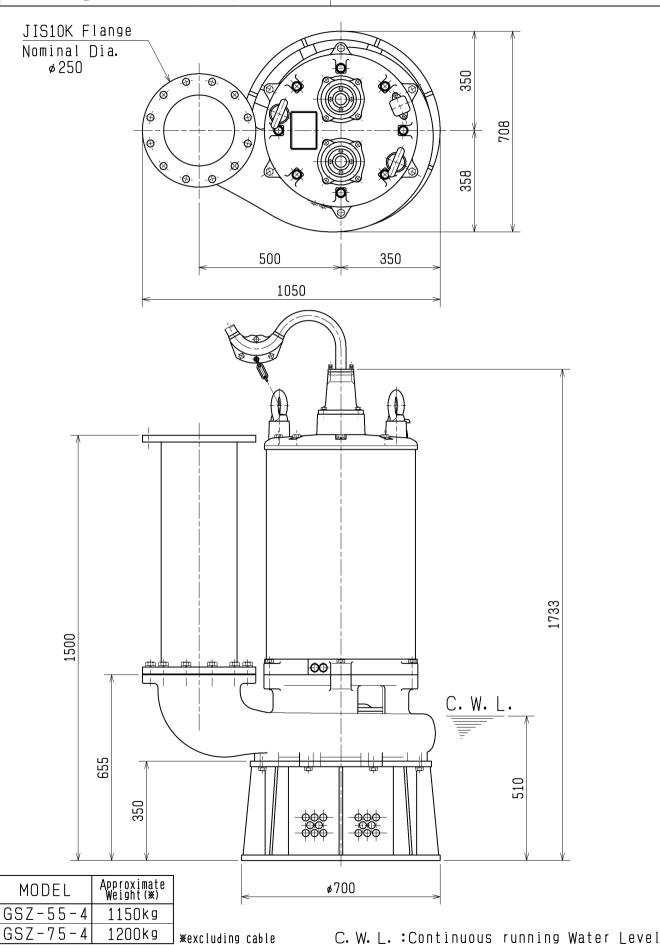
A-22145-1 NO. PUMP PERFORMANCE CURVES TYPE Submersible MODEL FREQUENCY GSZ-55-4 50 High-Head Dewatering Pump Ηz CUSTOMER'S NAME EQUIPMENT TITLE NO. STANDARD SPECIFICATIONS REQUIRED SPECIFICATIONS 250 DISCHARGE BORE 35 TOTAL HEAD m 6.0 m³/min m³/min CAPACITY 55 MOTOR OUTPUT k₩ k₩ 3 ø× PHASE × VOLTAGE φX CURRENT Α  $min^{-1}$ 4 P/  $S. S. 1500 min^{-1}$ POLES / REVOLUTION P/ STARTING METHOD STAR DELTA Ε INSULATION CLASS REMARKS: 100+ + 5090+ 80+ + 4070 + 60+ + 3050 +40+ + 2030 + 70 +DUTPUT 20 + 50 + 1010+30+ % k W 2 4 6 8 10 m³/min PUMP MOTOR TOTAL EFF. OUTPUT HEAD CAPACITY TSURUMI MFG. CO., LTD.

TSURUMI PUMP

DIMENSION DRAWING No. No. A-22149-1

TYPE Submersible High-Head Dewatering Pump

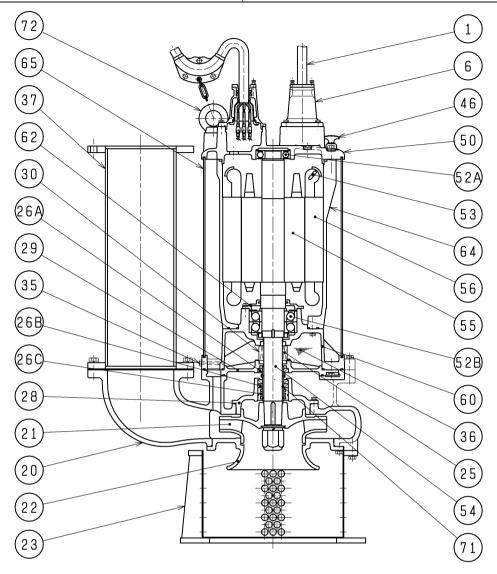
MODEL GSZ-55-4, GSZ-75-4





SECTIONAL DRAWING No. No. A-22150-1

TYPE Submersible High-Head Dewatering Pump GSZ-55-4, GSZ-75-4



\*55kW:Chromium Steel
75kW:Stainless Steel Casting

REQ. SPECIFICATION

|     | 70MH-Gealmisso George Sacring |       |                                     |     |                   |       |                       |  |
|-----|-------------------------------|-------|-------------------------------------|-----|-------------------|-------|-----------------------|--|
| No. | DESCRIPTION                   | Q' TY | MATERIAL / NOTE                     | No. | DESCRIPTION       | Q' TY | MATERIAL / NOTE       |  |
| 1   | Cabtyre Cable                 | 2     | Chloroprene Sheath                  | 46  | Air Release Valve | 1     | Steel Sheet           |  |
| 6   | Stuffing Box                  | 2     | Gray Iron Casting                   | 50  | Motor Bracket     | 1     | Gray Iron Casting     |  |
| 20  | Pump Casing                   | 1     | Gray Iron Casting                   | 52A | Upper Bearing     | 1     | 6312ZZC3              |  |
| 21  | Impeller                      | 1     | *                                   | 52B | Lower Bearing     | 1     | 7317ADB               |  |
| 22  | Suction Cover                 | 1     | Gray Iron Casting                   | 53  | Motor Protector   | 3     |                       |  |
| 23  | Strainer                      | 1     | Structure Sheet                     | 54  | Shaft             | 1     | Stainless Steel 420J2 |  |
| 25  | Mechanical Seal               | 1     | H-70                                | 55  | Rotor             | 1     |                       |  |
| 26A | Oil Seal                      | 1     | TC8011515                           | 56  | Stator            | 1     |                       |  |
| 26B | Oil Seal                      | 2     | TC8011515                           | 60  | Bearing Housing   | 1     | Gray Iron Casting     |  |
| 26C | Labyrinth Ring                | 1     | Stainless Steel 403                 | 62  | Bearing Cover     | 1     | Gray Iron Casting     |  |
| 28  | Seal Housing                  | 1     | Gray Iron Casting                   | 64  | Motor Frame       | 1     | Gray Iron Casting     |  |
| 29  | Oil Casing                    | 1     | Gray Iron Casting                   | 65  | Outer Cover       | 1     | Structure Sheet       |  |
| 30  | Oil Lifter                    | 1     | Steel Sheet                         | 71  | Shaft Sleeve      | 1     | Stainless Steel 403   |  |
| 35  | Oil Plug                      | 2     | Stainless Steel 304                 | 72  | Eyebolt           | 2     | Structure Steel       |  |
| 36  | Lubricant                     |       | Turbine Oil (ISO VG32)              |     |                   |       |                       |  |
| 37  | Discharge Pipe                | 1     | Carbon Steel Pipe & Structure Steel |     |                   |       |                       |  |