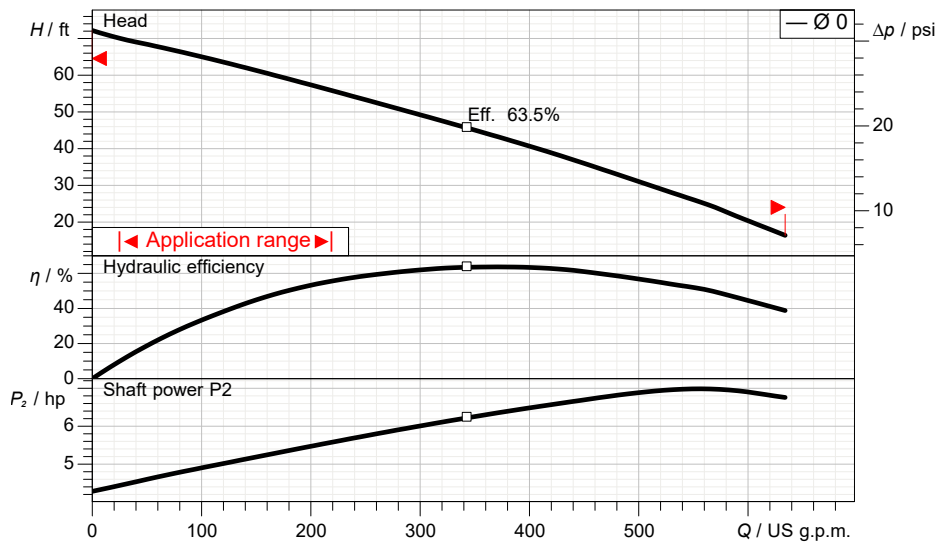


Technical specification

3~ 60 Hz


Pump

Series	BN
Pump name	100BN45.5-61
Standard	cETLus

Motor data

Motor	CT1-4-5.5-B2(2) UL
Rated voltage	208-230/460/575 V
Frequency	60 Hz
Motor phases	3~
Number of poles	4
Rated power P2	7.50 hp
Rated current	22.2-20.8/10.4/8.3 A
rpm	1731 rpm
Rated torque	22.8 lbf ft
Start*	Direct starting

Degree of protection	IP 68
Insulation class	F
Protection device	Circle thermal protector
Type of oil	Turbine oil VG32
Oil amount	142.0 oz

Hydraulic

Free passage	1.38in/35mm
Impeller type	Channel impeller with Cutting mechanism
Max. hydraulic efficiency	63.5 %
Discharge	4 inch
Curve tolerance	UNI EN ISO 9906:2012

Operating limits (standard pumps)

Max. liquid temperature	104 °F
Max. density treated liquid	64.3 lb/ft³
pH treated liquid	5-9
Recommended Max. start per hour(equally distributed)	10
Wet/dry use	WET
Operating mode	S1

Construction materials

Motor enclosure	Gray Iron Casting 200
Shaft	420J2 Stainless Steel
Pump Casing	Gray Iron Casting 250
Impeller	Ductile Iron Casting 500
Suction Cover	Ductile Iron Casting 500
Suction plate	N/A
Painting	Epoxy paint (Black)
Screws	304 Stainless Steel
Gaskets	NBR

Construction features

Power cable1	4Cx12AWG
Power cable2	N/A
Sheath	2PNCT
Control cable	N/A
Sheath	N/A
Cable length*	32.81 ft
Mechanical seals	Dual SiC
Pump weight**	366 lb
* Please inquire about cable extensions	
** cable's weight not included	

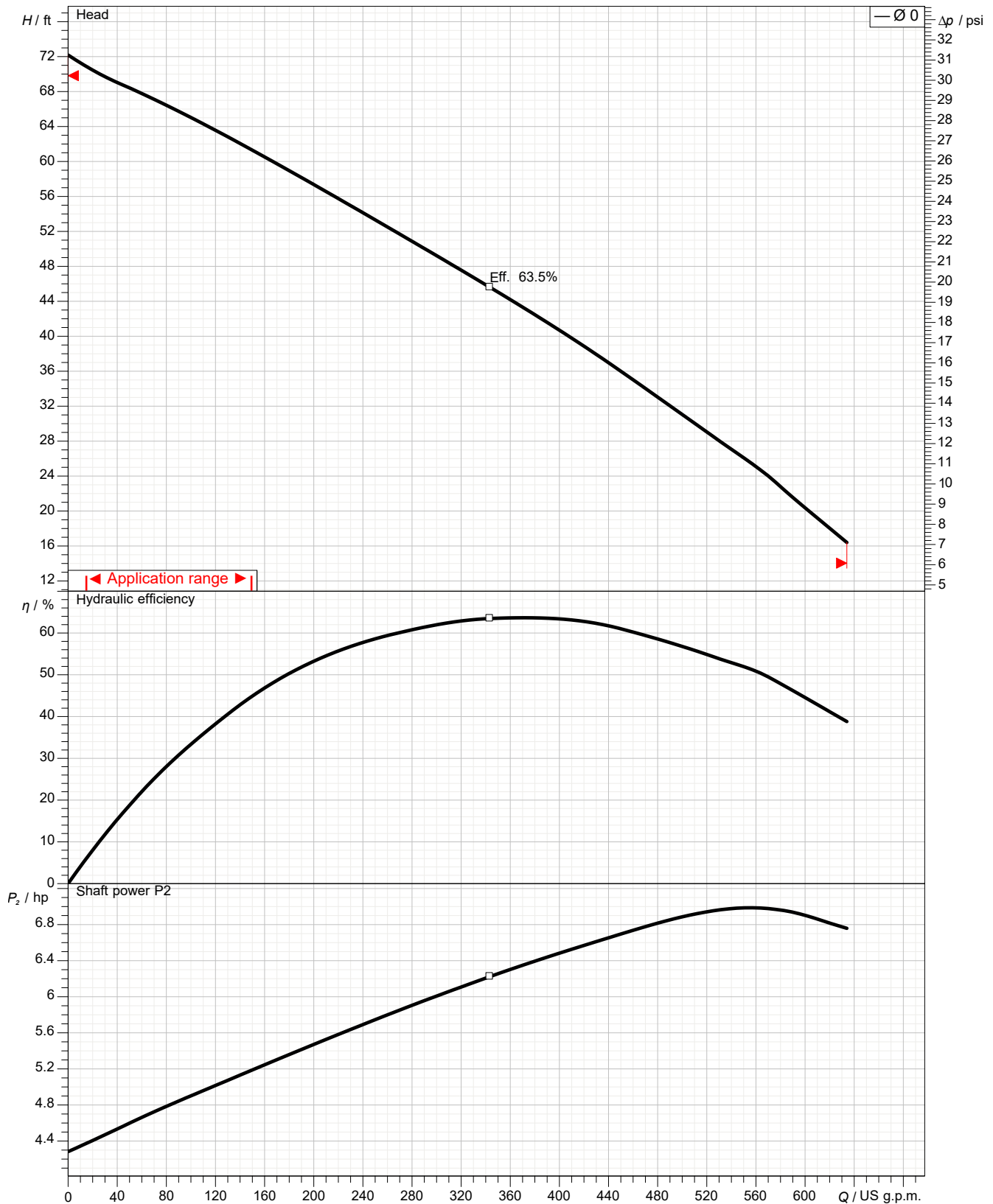
Monitoring features

Leakage sensor - N/A

Pump performance curves

3 ~ 60 Hz

Discharge	Head	Capacity	Rated power	Voltage	Current	rpm
4 inch			7.5 hp	208-230/460/575 V	22.2-20.8/10.4/8.3 A	1731 rpm



A319511_N5_P-C_100BN45.5-61I

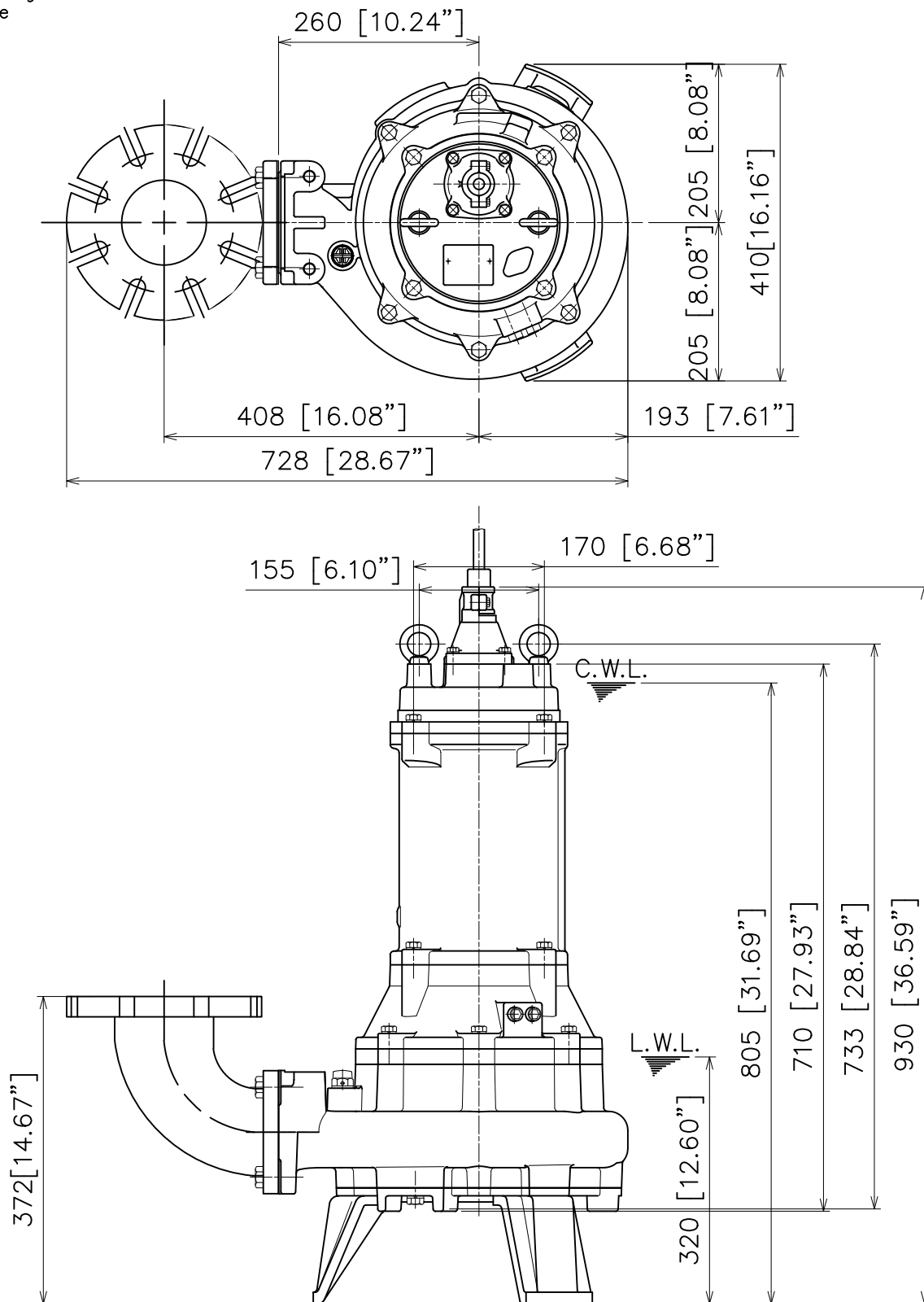
created on: 2026-08-12

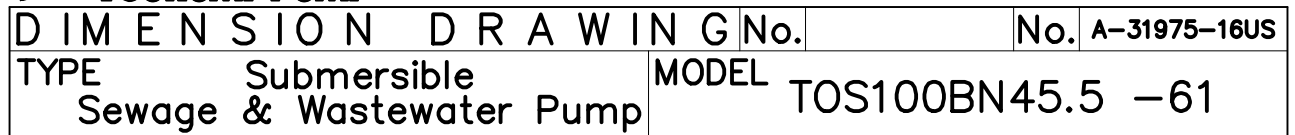
All data shown are not binding. Tsurumi reserves the right to change data and dimensions without notice.

DIMENSION DRAWING No.		No.	A-31961-16US
TYPE	Submersible Sewage & Wastewater Pump	MODEL	100BN45.5 -61

Approximate Weight(※)
366lbs
※excluding cable

Bend
Model: 100-100 ANSI

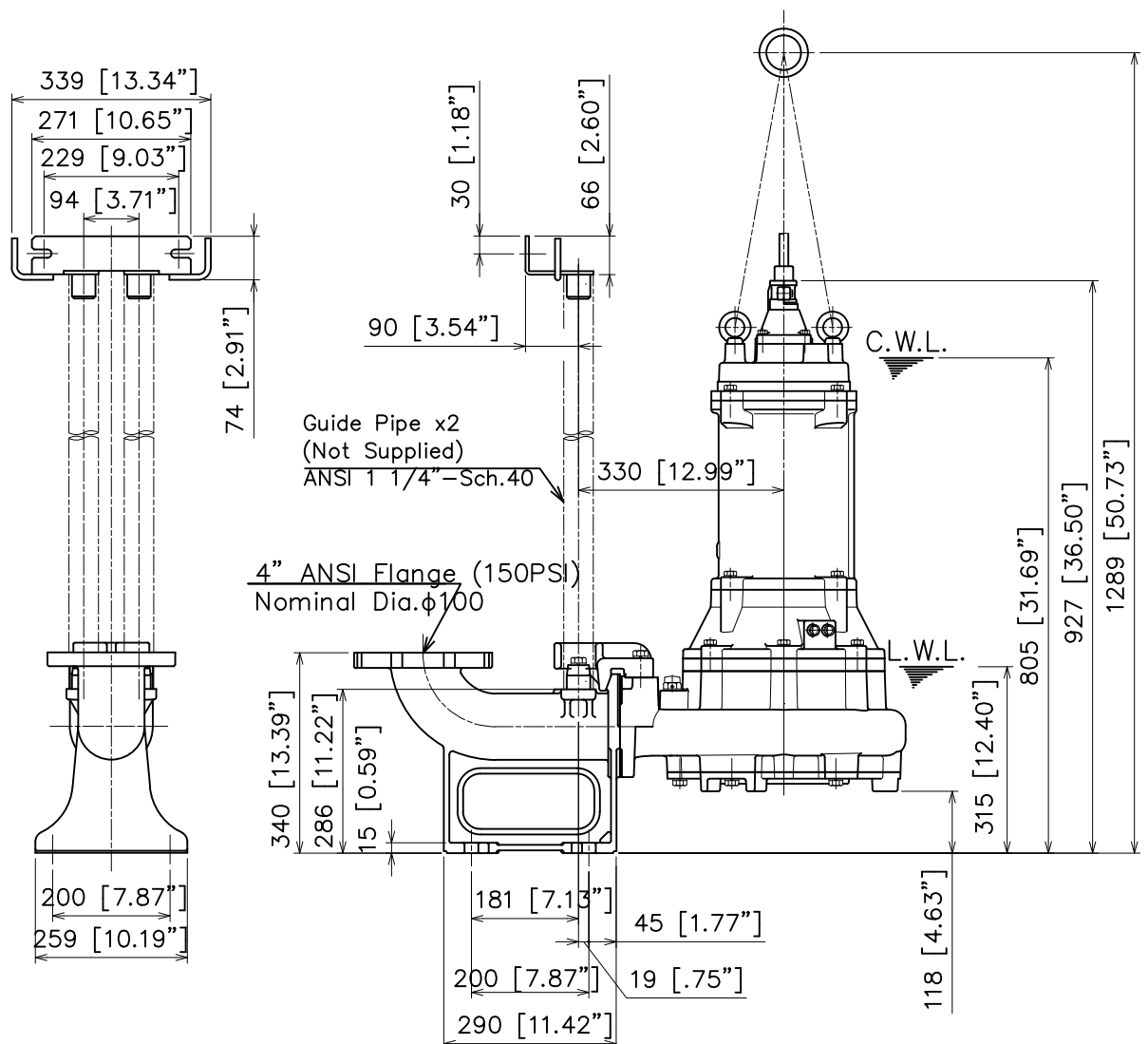




※excluding cable

Technical drawing of the front view of the 1000 Series Hydraulic Pump. The drawing shows a circular pump housing with a central mounting flange and a side-mounted port. Dimensions are provided in inches and millimeters.

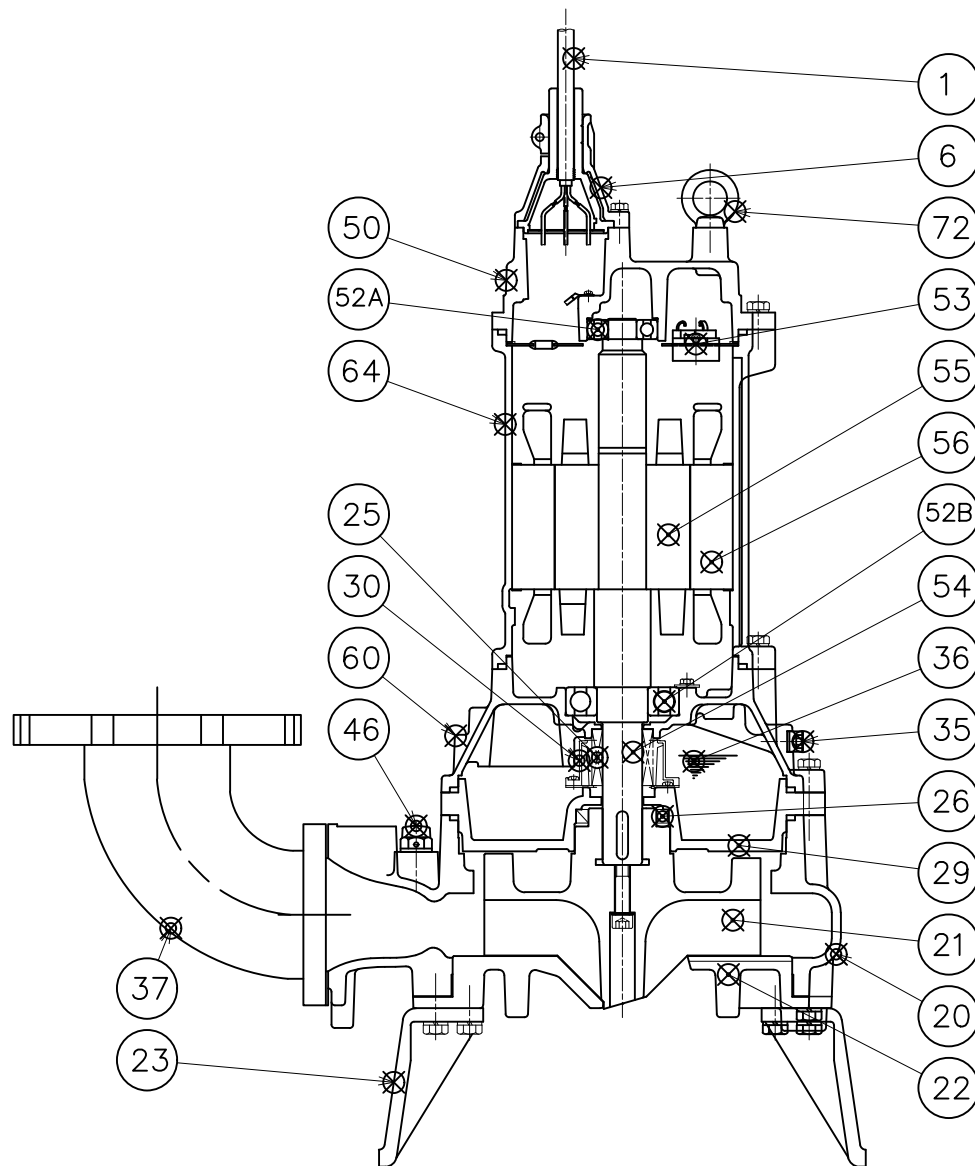
Dimension	Value (inches)	Value (millimeters)
Overall Width	203	5167
Overall Height	600	15240
Port Flange Diameter	181	4596
Port Flange Thickness	299	7590
Port Flange to Housing Distance	420	10668
Housing Diameter	613	15570
Port Flange to Housing Distance (Inner)	193	4915
Port Flange to Housing Distance (Outer)	391	9930
Port Flange to Housing Distance (Total)	188	4776
Port Flange to Housing Distance (Total)	7.99	203
Port Flange to Housing Distance (Total)	15.37	391
Port Flange to Housing Distance (Total)	23.62	600



C.W.L.: Continuous running Water Level
L.W.L.: Lowest running Water Level

TSURUMI MFG. CO., LTD. unit:mm

SECTIONAL DRAWING No.			No.	A-31968-16US
TYPE Submersible Sewage & Wastewater Pump		MODEL 100BN45.5 -61		



REQ.SPECIFICATION

No.	DESCRIPTION	Q'TY	MATERIAL / NOTE	No.	DESCRIPTION	Q'TY	MATERIAL / NOTE
1	Cabtyre Cable	1	Chloroprene Sheath	46	Air Release Valve	1	Nylon
6	Stuffing Box	1	Gray Iron Casting 200	50	Motor Bracket	1	Gray Iron Casting 200
20	Pump Casing	1	Gray Iron Casting 250	52A	Upper Bearing	1	HCC Steel (6305ZZC3)
21	Impeller	1	Ductile Iron Casting 500	52B	Lower Bearing	1	HCC Steel (6309ZZC3)
22	Suction Cover	1	Ductile Iron Casting 500	53	Motor Protector	1	
23	Stand	3	Gray Iron Casting 200	54	Shaft	1	420J2 Stainless Steel
25	Mechanical Seal	1	Silicon Carbide (H-35)	55	Rotor	1	
26	Oil Seal	1	Nitrile (TC608212)	56	Stator	1	
29	Oil Casing	1	Gray Iron Casting 250	60	Bearing Housing	1	Gray Iron Casting 200
30	Oil Lifter	1	Plastic	64	Motor Frame	1	Gray Iron Casting 200
35	Oil Plug	2	304 Stainless Steel	72	Eyebolt	2	304 Stainless Steel
36	Lubricant		Turbine Oil(ISO VG32)				
37	Discharge Bend	1	Gray Iron Casting 200				

**TSURUMI MFG. CO.,
LTD.**