

Submersible Drainage Pump J 604

SULZER

Specification

Electric submersible pump.
 Maximum submergence: 20 m (65 ft). Protection class IP 68.
 Max temperature of pumped medium at max power input and continuous duty 40 °C (104 °F).
 Max medium density 1100 kg/m³ (0.0397 lbs/inch³).
 pH of the pumped medium 5-8.
 Strainer hole: 12 x 60 mm (1/2" x 2 3/8").
 Max number of starts 30/hour.

J 604 ND Medium head, 3-phase

J 604 HD High head, 3-phase

Electric Motor

3-phase squirrel-cage induction motor, 60 Hz.
 Service factor 1.1. Class F insulation.
 Motor rating P₂: 70.0 kW (94 Hp). Speed: 1730 rpm

Voltage, V	230	380	460	575
Nominal current, A	226	137	113	91

Starting Method

D.O.L. start with built-in terminal block.
 Star-Delta start with built-in terminal block.
 When used with VFD, pump must be equipped with terminal block.

Power Cable

20 m/65 ft H07RN8-F (standard cable):
 2-4x25 sq.mm. + 7x1.5 sq.mm. (380V star-delta start)
 2-4x16 sq.mm. + 7x1.5 sq.mm. (460-575V star-delta start)

20 m/65 ft H07RN8-F (standard cable):
 2-4x35 sq.mm. + 7x1.5 sq.mm. (230V)
 1-4x35 sq.mm. + 7x1.5 sq.mm. (460-575V D.O.L.-start)

20m/65 ft NSSHÖU.../3E (heavy duty cable):
 3x25+3x16/3E+3x2.5 (3 control cables included) (460-575V D.O.L.)

Motor Protection

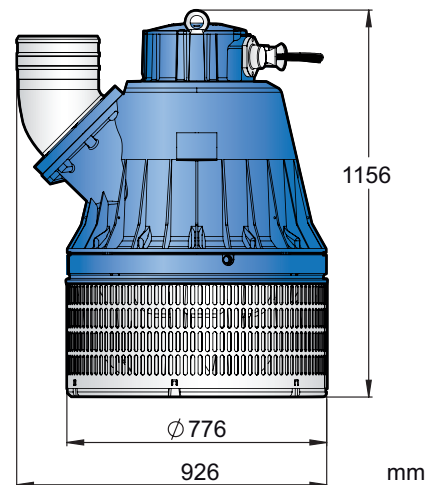
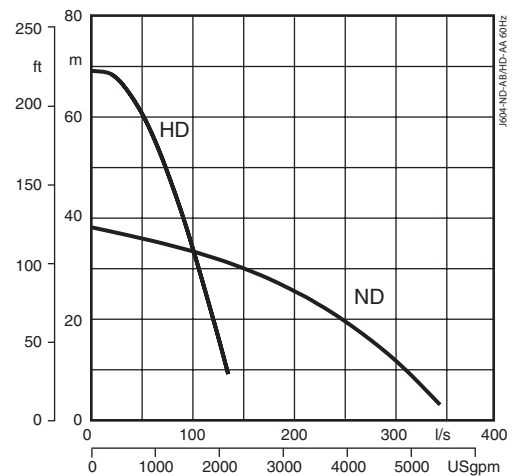
Built-in thermal switches in the stator windings (140°C/284°F, ±5).
 DI leakage sensor in the junction box, DI leakage sensor in the oil chamber, thermal sensors at upper (120°C/248°F) and lower (90°C/194°F) bearing connected to a separate starter and control unit.

Shaft Seal

Double mechanical seal in oil bath.
 Primary seal: Silicon carbide on silicon carbide.
 Secondary seal: Carbon on stainless steel.

Bearings

Upper bearing: Single-row deep groove ball bearing.
 Lower bearing: Double angular contact ball bearing.



Discharge Connections

6" (standard HD), 8", 10" (standard ND) hose connections.
 6", 8" G/B.S.P. thread.
 6", 8", 10" NPT thread

Weight

525 kg / 1157 lbs (without cable)

Options and Accessories

Zinc anodes. Surface protection coating.
 Wear plate in polyurethane. Series connection (HD).
 Starter and control units. Automatic level control unit.
 Floatation system. Repair kit.
 Discharge connection accessories and hose.

Materials

Description	Material	EN	ASTM
Casing / Castings	Aluminium	EN 1706:AC-43100	ASTM A1Si10mg
Strainer / Fasteners	Stainless steel	10088:X5CrNi18-10 (1.4301)	AISI 304
Shaft	Stainless steel	10088:X20Cr13 (1.4021)	AISI 420
Impeller	White cast iron	EN-GJN-HV600(XCr23)	ASTM A 532: Alloy III A
Wear parts / O-rings	Nitrile rubber		