

# Submersible Drainage Pump Type ABS J 604

## Specification

Electric submersible pump.  
 Maximum submergence: 20 m. • Protection class IP 68.  
 Max temperature of pumped medium at max power input and continuous duty 40°C.  
 Max medium density 1100 kg/m<sup>3</sup>. • pH of the pumped medium 5-8.  
 Strainer hole 12 x 60 mm. • 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, 50 Hz.  
 Service factor 1.1. Class F insulation.  
 Motor rating P<sub>2</sub>: 56.0 kW. Speed: 1450 rpm

Voltage, V	230	400	500 - 550	690	1000
Nominal current, A	184	106	84 - 80	61	42

## 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 type S1BN8-F (standard cable):  
 2-4x35 sq.mm.+A07RN-F 7x1.5 sq.mm. (230 V star-delta start)  
 2-4x16 sq.mm.+A07RN-F 7x1.5 sq.mm. (400-550 V star-delta start)  
 2-4x10 sq.mm.+A07RN-F 7x1.5 sq.mm. (690 V star-delta start)  
 4x35 sq.mm.+A07RN-F 7x1.5 sq.mm. (400-550 V DOL-start)  
 4x25 sq.mm.+A07RN-F 7x1.5 sq.mm. (690 V DOL-start)

20 m type NSSHÖU.../3E (heavy duty cable):  
 3x10+3x10/3E+3x2.5 (3 control cables included) (1000 V DOL-start)  
 3x16+3x16/3E+3x2.5 (3 control cables included) (690 V DOL-start)  
 3x25+3x16/3E+3x2.5 (3 control cables included) (400-550 V DOL-start)

## Motor Protection

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

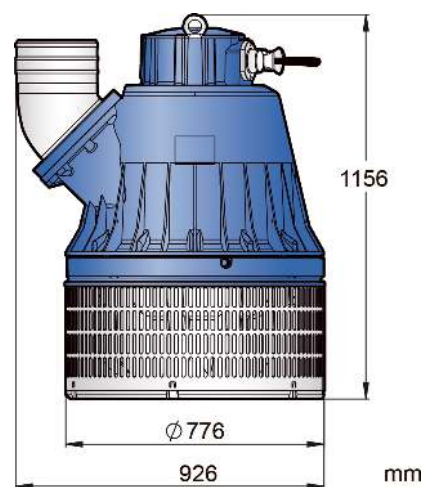
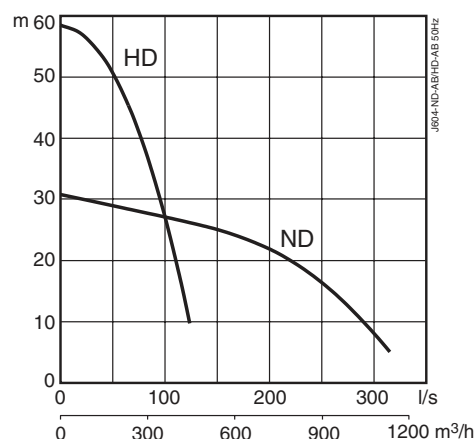
## Shaft Seal

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.

EN 50 Hz



## Discharge Connections

6" (standard HD), 8", 10" (standard ND) hose connections.  
 6", 8" B.S.P. threaded connections.

## Weight (without cable)

525 kg

## 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		EN	ASTM
Casing and castings	Aluminium	EN 1706: AC-43100	ASTM AlSi10mg
Strainer and 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		