

Submersible drainage pump J 405

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: 8 x 34 mm (5/16" x 1 5/16").
 Max number of starts 30/hour.

J 405 ND Medium head, 3-phase
J 405 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: 43.0 kW (57 Hp). Speed: 3537 rpm

Voltage, V	230	380	460	575
Nominal current, A	136	82	68	54

Starting method

D.O.L. start with built-in contactor or terminal block (230-575 V).
 Star-Delta start with built-in terminal block (230 V, 460 V).
 When used with VFD, pump must be equipped with terminal block.

Power cable

20 m/ 65 ft H07RN8-F (standard cable):
 4x25 sq.mm. + 4x1.5 sq.mm. (380-575V D.O.L. with contactor)
 4x25 sq.mm. + 4x1.5 sq.mm. (380-575V D.O.L. with terminal block)
 2-4x25 sq.mm. + 4x1.5 sq.mm. (230V D.O.L./star-delta start)
 2-4x16 sq.mm. + 4x1.5 sq.mm. (380-575V star-delta start)

20m/65 ft NSSHÖU.../3E (heavy duty cable):
 3x16+3x16/3E+3x2.5 (3 control cables included) (380-575V D.O.L.)

Motor protection

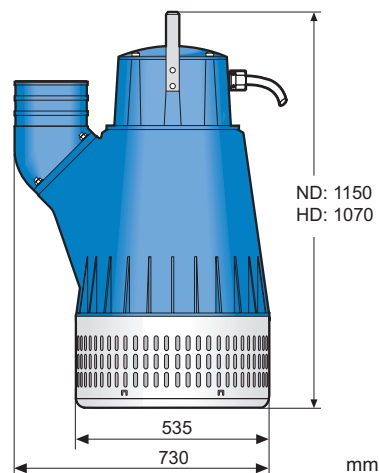
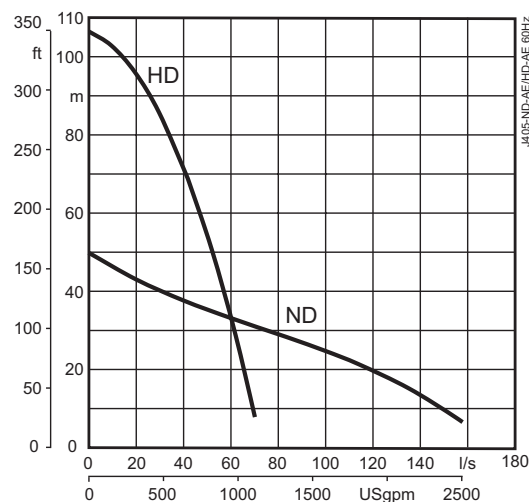
Built-in thermal switches in the stator winding (140°C/284°F, ±5), connected to built-in contactor or to separate control box.
 DI leakage sensor as option, but not in combination with built-in contactor.

Shaft seal

Double mechanical seal in oil bath, mounted in seal cartridge for easy service.
 Primary seal: Silicon carbide on silicon carbide.
 Secondary seal: Silicon carbide on antimony treated carbon.

Bearings

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



Discharge connections

4" (standard HD), 6", 8" (standard ND) hose connections.
 4", 6", 8" B.S.P. thread.
 4", 6", 8" NPT thread.

Weight

270 kg / 595 lb (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 / Handle / 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		