

Submersible drainage pumps jacket cooled for abrasive drainage water.

HBP501 - HBP512

Application

Pump for conveying clear water or drainage water with abrasive sand or mud additives. The pumps are used to pump surface water from building sites, wells, subways or tunnels, for lowering ground water, for irrigation, supply of industrial water, application on board ships etc.

Installation: Transportable or permanent. Version with float switch for use as automatic water level controlled drainage pump.

Conveying medium: Clear water or drainage water with abrasive sand or mud additives. Max. liquid temperature: 40°C

Operation: Permanent (S1).

Design

Fully submersible drainage pump consisting of:

Pump: Single stage centrifugal pump with the discharge on top.

Impeller: open multi-channel impeller.

Motor: Fully submersible, pressure tight, jacket cooled motor, insulation class F, Motor protection IP 68. Cable connection chamber totally isolated from motor housing. 1 phase model with thermal sensor embedded in motor winding.

Connection cable:

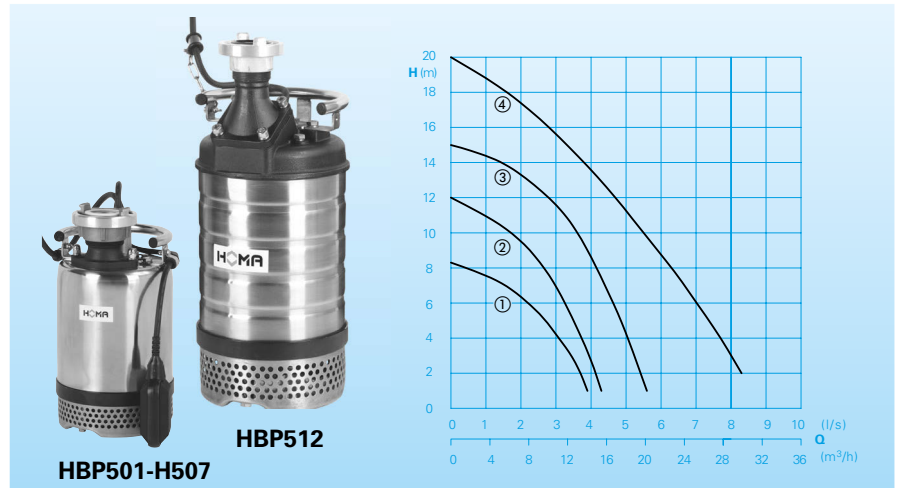
HBP501-507: H07RN8-F4G1

HBP512: H07RN8-F4G1,5

Shaft/Bearing: generously-proportioned chromium steel motor shaft, permanently-lubricated roller bearing.

Seal: Shaft seal combined with a double action mechanical seal in oil bath.

Performances



Technical Data

Curve No.	Pump type	Motor power		Spherical clearance	Nominal current (A)	Weight (kg)
		P ₁ (kW)	P ₂ (kW)			
①	HBP501 WA	0,47	0,25	6	2,1	15,0
②	HBP503 WA	0,67	0,40	6	3,0	16,0
③	HBP507 WA	1,1	0,75	6	5,0	18,0
④	HBP512 WA	2,1	1,5	8	10,0	36,0
④	HBP512 D	2,0	1,5	8	3,5	37,0
④	HBP512 DA	2,0	1,5	8	3,5	39,0

Speed: 2900 rpm

Discharge: BSP 2

Model W: 230V/1Ph 50Hz

Model D: 400V/3Ph 50Hz

Model A: with automatic float switch HOMA-Nivomatik

Equipment supplied

Pump with 10 m connection cable and Storz C-coupling.

Model WA (230 V/1 Ph):

With automatic float switch HOMA-Nivomatik (A), HOMA switch gear WA1, motor protection, AUTO-Manual switch, plug.

Model DA (400 V/3 Ph):

With automatic float switch HOMA-Nivomatik (A), HOMA switch gear D32, motor protection, ON-OFF switch, 16ACEE phase inverter.

Model D (400 V/3 Ph):

with HOMA switch gear D32, motor protection, ON-OFF switch, 16ACEE phase inverter.

Materials

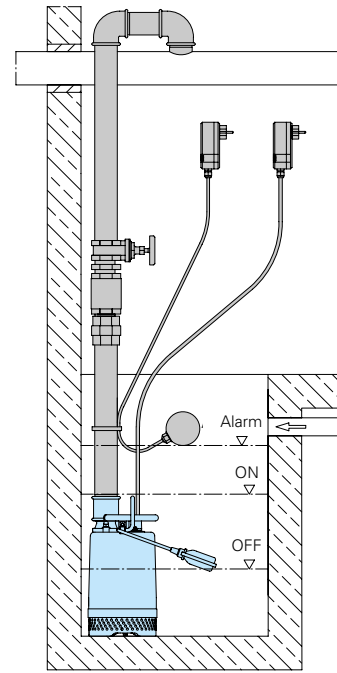
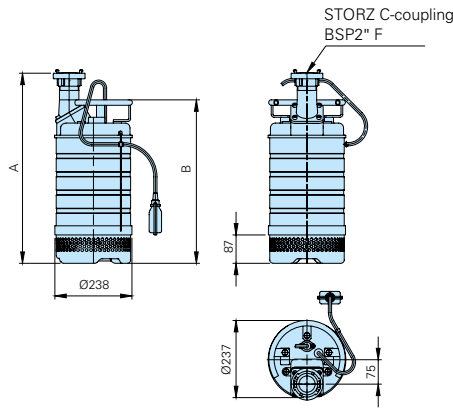
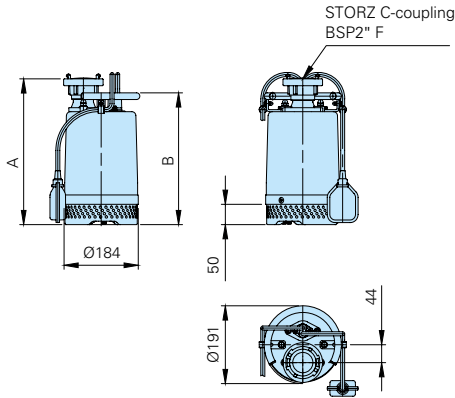
Motor housing	Stainless steel
Motor shaft	Stainless steel
Screws	Stainless steel
Impeller	
HBP501-507	Cast iron GJS
HBP512	Hard cast iron
Pump housing,	
HBP501-507	Cast iron GG
HBP512	Cast iron GJS
Outer casing	Stainless steel
Shaft seal	Shaft sealing ring
HBP501-512	NBR + double action mechanical seal Ceramic/Coal/SIC
Elastomer	NBR

Dimensions and Installations (all dimensions in mm)

HBP501, 503, 507 WA

HBP512 WA, 512 D, 512 DA

Permanent sump installation with pipework, level control and switch gear

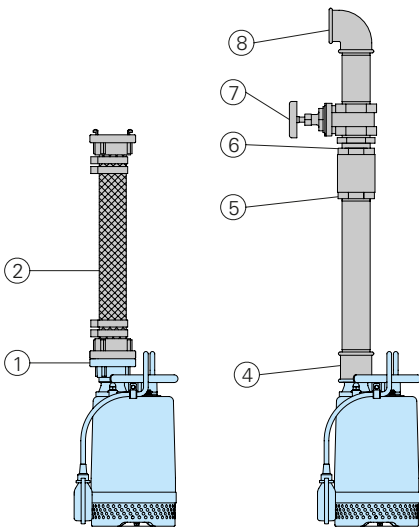


Type	A	B
HBP501 WA	339	305
HBP503 WA	339	305
HBP507 WA	359	325
HBP512 WA	583	501
HBP512 D	563	481
HBP512 DA	613	531

Accessories

Description	Size	Part-No.
① STORZ-fixed coupling	equipment	supplied
Plastic-spiral hose, per m	C-BSP 2" M	2632050
STORZ-hose-coupling	50 mm Ø	2013003
Synthetic pressure hose with rubber linings, completely with C-couplings	length 10 m	2611310
	length 15 m	2611315
	length 20 m	2611320
length 30 m	2611330	
Hose clip	2"	2306009
④ Transitional screw mounting, galvanised	BSP 2" M/F	2114311
⑤ Non-return valve, brass	BSP 2" F	2211413
⑥ Double nipple, galvanised	BSP 2" M	2009018
⑦ Gate valve, brass	BSP 1½" F	2216015
	BSP 2" F	2216020
⑧ 90° angle, galvanised	BSP 2" F	2113606
T-piece for merging the pressure pipe in dual systems, galvanised	BSP 2" F	2114306

Description	Size	Part-No.
○ Residual current device 2-pin, Fi 16/0.03 A		1561160
○ Mains-dependent alarm control unit AL3 with connector for 9 V rechargeable battery (see below) for operation independent of mains power supply, with built-in signal transmitter for 230 V, 1-phase mains connection		1586141
9V battery for mains-independent alarm		1952215
○ Float valve switch MB, mercury-free, MIN or MAX function, with integrated counterweight	Cable length 6 m	1465706
	10 m	1465710
○ Pump control systems and switching gear for mobile and permanent usage, level recording and monitoring devices see HOMA accessories		



HOMA Pumpenfabrik GmbH
 P.O. Box 22 63, D-53814 Neunk.-Seelscheid
 Tel. +49 (0) 22 47/702-0, Fax +49 (0) 22 47/702-44
 e-mail: info@homa-pumpen.de
 www.homapumps.com