

Submersible drainage pumps jacket cooled for abrasive drainage water.

HBP501 - HBP555

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: Permanent or transportable. 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: pressure tight, jacket cooled motor, insulation class F, Motor protection IP 68. Cable connection chamber totally isolated from motor housing. With thermal sensor embedded in motor winding.

Connection cable:

HBP501-507: H07RN8-F4G1

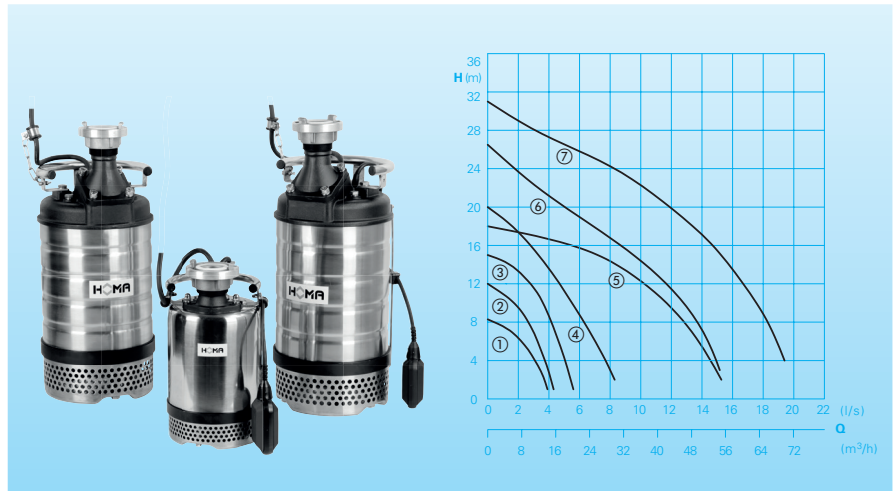
HBP512: H07RN8-F4G1,5

HBP522-555: H07RN8-F4G2,5

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.

Performance



Technical Data

Curve No.	Pump type	Motor power P ₁ (kW)	Motor power P ₂ (kW)	Nominal current (A)	Spherical clearance	Discharge	Weight (kg)
①	HBP501 WA	0,47	0,25	2,1	6	G2	15,0
②	HBP503 W(A)	0,67	0,40	3,0	6	G2	16,0
③	HBP507 WA	1,1	0,75	5,0	6	G2	18,0
④	HBP512 WA	2,1	1,5	10,0	8	G2	36,0
④	HBP512 D	2,0	1,5	3,5	8	G2	37,0
④	HBP512 DA	2,0	1,5	3,5	8	G2	39,0
⑤	HBP522 D(A)	3,0	2,2	5,3	9	G3	37,5
⑥	HBP537 D(A)	4,6	3,7	7,7	9	G3	60,5
⑦	HBP555 D(A)	6,7	5,5	11,4	9	G3	67,0

Speed: 2850 rpm
Discharge: G2 - G3

Model W: 230V/1Ph 50Hz

Model D: 400V/3Ph 50Hz

Model A: with automatic float switch HOMA-Nivomatik

Materials

Motor housing	Stainless steel
Motor shaft	Stainless steel
Screws	Stainless steel
Impeller HBP501-507 HBP512-555	Cast iron GJS Hard cast iron
Pump housing, HBP501-507 HBP512-555	Cast iron GG Cast iron GJS
Outer casing	Stainless steel
Shaft seal HBP501-512	Shaft sealing ring NBR + double action mechanical seal Ceramic/Coal/SIC
Elastomer	NBR

Equipment supplied

Pump with 10 m (HBP501-512) or 20 m (HBP522-555) connection cable and STORZ-fixed 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):

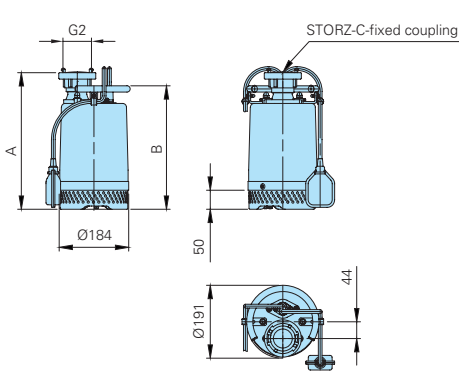
With automatic float switch HOMA Nivomatik (A), HOMA switch gear D(A20)/32, Motor protection, ON-OFF switch, 16A CEE phase inverter.

Model D (400 V/3 Ph):

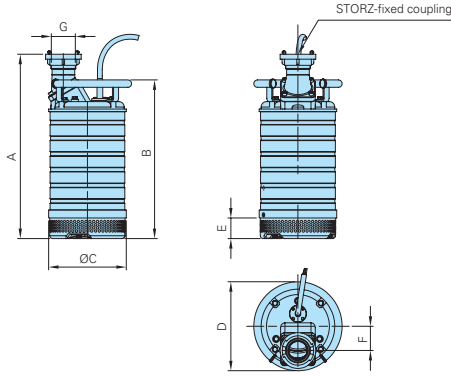
with HOMA switch gear D32, motor protection, ON-OFF switch, 16ACEE phase inverter.

Dimensions and Installations (all dimensions in mm)

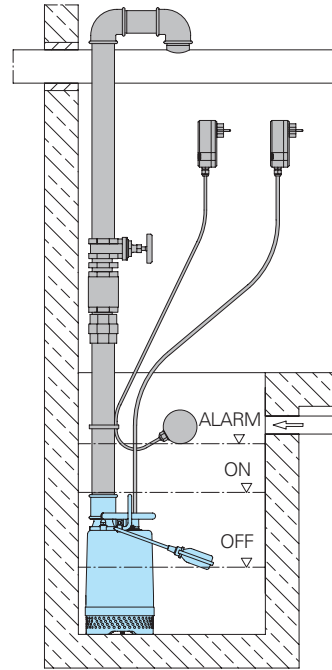
HBP501, 503, 507 WA



HBP512, 522, 537, 555

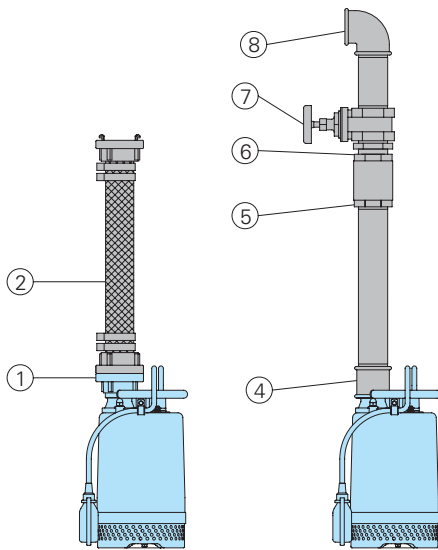


Permanent sump installation with pipework, level control and switch gear



Type	A	B	C	D	E	F	G	Coupling
HBP501 WA	339	305	-	-	-	-	-	-
HBP503 WA	339	305	-	-	-	-	-	-
HBP507 WA	359	325	-	-	-	-	-	-
HBP512 WA	583	501	238	244	87	75	G2	STORZ-C
HBP512 D	563	481	238	244	87	75	G2	STORZ-C
HBP512 DA	613	531	238	244	87	75	G2	STORZ-C
HBP522 D(A)	569	481	238	267	87	85	G3	STORZ-B
HBP537 D(A)	606	516	274	312	72	85	G3	STORZ-B
HBP555 D(A)	646	556	274	312	72	85	G3	STORZ-B

Accessories



Description	Size	Part-No.	Description	Size	Part-No.
① STORZ-fixed coupling		included	○ Residual current device, 2-pin, Fi 16/0,03 A		1561160
Plastic-spiral hose, per m	50 mm Ø	2632050	○ 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, float switch and 10 m of cable. Main phase connection 230V/1Ph		1586141
STORZ-hose-coupling	C-52 mm	2013003	Battery for mains-independent operation 9V		1952215
	B-75 mm	2013502	○ Pump control systems and switching gear for mobile and permanent usage, level recording and monitoring devices	See HOMA accessories	
② Synthetic pressure hose, with rubber linings, completely with C-couplings	10 m long	2611310			
	15 m long	2611315			
	20 m long	2611320			
	30 m long	2611330			
Synthetic pressure hose, with rubber linings, completely with B-couplings	10 m long	2611210			
	15 m long	2611215			
	20 m long	2611220			
	30 m long	2611230			
Hose clip	2"	2306009			
④ Transitional screw mounting, galvanised	BSP 2" M/F	2114311			
⑤ Non-return valve, brass	BSP 2" F	2211413			
	BSP 3	2211613			
⑥ Double nipple, galvanised	BSP 2" M	2009018			
	BSP 3	2128030			
⑦ Gate valve, brass	BSP 1½" F	2216015			
	BSP 2" F	2216020			
	BSP 3" RG	2216030			
⑧ 90° angle, galvanised	BSP 2" F	2113606			
	BSP 3" F	2111810			
T-piece for merging the pressure pipe in dual systems, galvanised	BSP 2" F	2114306			



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