

## Wear resistant submersible drainage pumps for clear water and drainage water.

### H 119, H 121

#### Application

HOMA H 119 and H 121 are wear resistant submersible drainage pumps for pumping clear water or drainage water with abrasive sand or mud additives. They are used to pump surface water from sumps, subways and building sites, supply of industrial water, application on board ships etc.

**DIN EN 12050-2:** Conformity and design approved and controlled by LGA.

**Installation:** Transportable or permanent. Models with float switch control for automatic pump operation, depending on liquid level in the sump.

**Pumped liquid:** Clear water or drainage water containing solids up to 10 mm spherical clearance. Max. liquid temperature: 40°C, short term up to 60°C.

**Operation:** Permanent operation (S1)

#### Design

Fully submersible, compact integrated motor-pump unit consisting of:

**Pump:** Single stage centrifugal pump with horizontal discharge.

**Impeller:** Open multi-channel impeller, spherical clearance 10 mm. The distance between impeller and casing can be readjusted to maintain maximum performance.

**Motor:** Fully submersible, pressure tight electric motor, oil-filled. Insulation class H. Motor protection IP 68. Model W and Ex with thermal sensors embedded in motor winding.

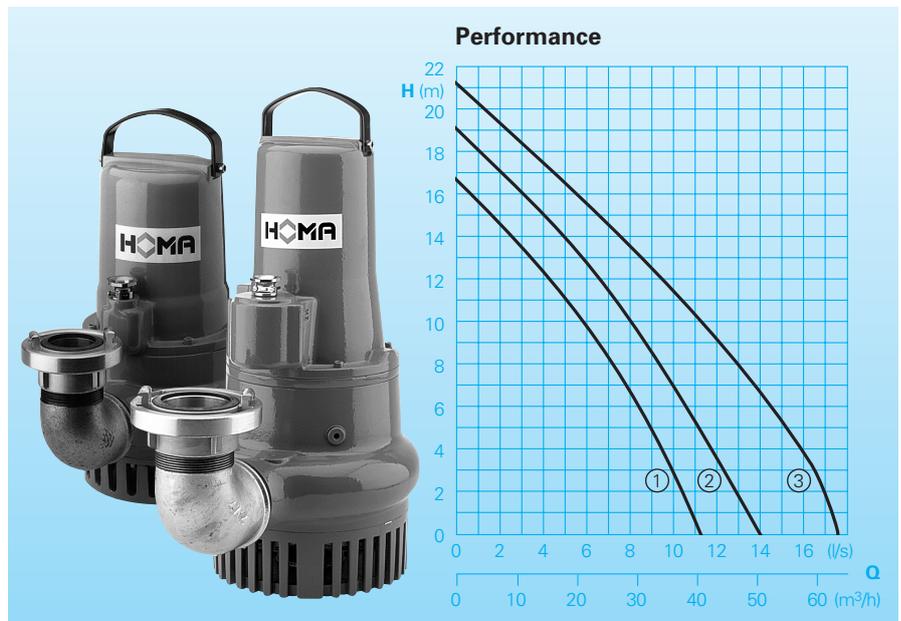
Cable: H07RN8-F4G1,5

Model Ex: H07RN8-F6G1,5

**Shaft/Bearing:** Large diameter stainless steel rotor shaft, prelubricated bearings, models H 121 lower bearing double-row type.

**Seals:** Combination of mechanical seals in a separate oil chamber. Oil check from outside. H 119 with 1 mechanical seal and 1 lip-seal. H 121 with 2 mechanical seals.

**Explosion protection:** All models are available with explosion proof motors according to  $\text{Ex II 2 G Ex c d II B T4(T3)}$ .



#### Technical Data

Curve No.	Pump type	Motor P <sub>1</sub> (kW)	Motor P <sub>2</sub> (kW)	Capacitor* (µF)	Nominal current (A)	Discharge	Weight (kg)
①	H119 W G (A) (Ex)	1,6	1,2	30	7,8	G 2 AG	26,0
②	H119 D G (A) (Ex)	1,6	1,2		2,9	G 2 AG	26,0
③	H121 D (A) (Ex)	2,7	2,3		4,5	G 2½ AG	40,0

**Speed:** 2900 rpm

**Model W:** 230-240V/1Ph 50Hz

**Model D:** 400-415V/3Ph 50Hz

**Model A:** With automatic level control HOMA-Nivomatik

**Model Ex:** explosion proof

\* **Capacitor:** For the operation it is necessary to install a capacitor in the control box.

#### Materials

Motor housing, pump housing, impeller, suction cover	Cast iron EN-GJL-250
Rotor shaft, screws Schrauben	stainless steel
Mechanical seals	Silicon carbide
Seal kit	Perbonane

#### Equipment supplied

Pump with 90° elbow, STORZ-fixed coupling size C, model H 121: size B. With 15 m of cable, control box and plug.

**Model W (230-240V/1Ph):**

With control box W19; WT19 fitted with overload protection, capacitor, on-off-switch and plug.

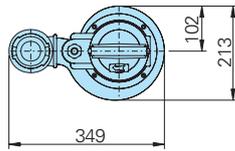
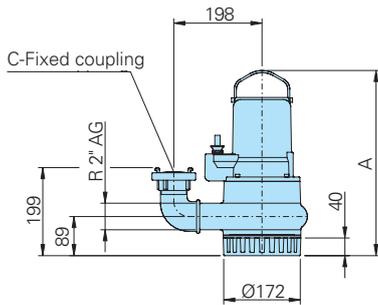
**Model D (400-415V/3Ph):**

With control box D32; DT32 fitted with overload protection, on-off-switch and phase inverter.

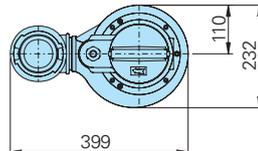
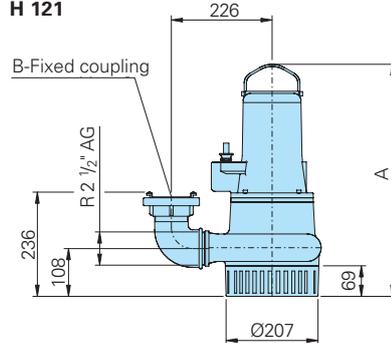
**Model A:** With additional automatic level control, AS float switch, manual-auto-switch, control box WA15/19; DA15/32; DA15/12.

**Dimensions** (all dimensions in mm)

**H 119**



**H 121**

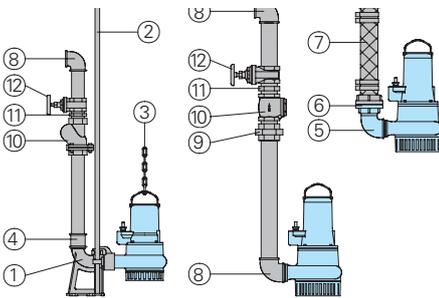


**Pump type**

**Dim. A**

H119 WG	419
H119 WG (Ex)	426
H119 DG	419
H119 DG (Ex)	426
H121 D (Ex)	525

**Accessories**



Part Description	Dimension	Part No.
① Auto-coupling system cast iron with counterflange – for H119, duck foot bend with thread, guide tube-bracket BSP1/2" KK50/R2"	BSP2"/BSP2"	8604005
– for H121, duck foot bend with flange, guide tube-bracket BSP1" KK65/BSP2 1/2"	DN65/BSP2 1/2"	8604015
○ Auto-coupling system complete or partial in stainless steel	all types	on request
○ Screw-kits for installation of coupling system		on request
Supporting brackets for guide tube extension	1/2" dia. for KK50 1" dia. for KK65	7320271 7323714
② Guide rails, pair, per m steel galvanized, – for KK50/R2"	1/2" dia.	2190085
– for KK65/R2 1/2"	1" dia.	2190135
stainless steel – for KK50/BSP2"	1/2" dia.	2190250
– for KK65/BSP2 1/2"	1" dia.	2190252

Part Description	Dimension	Part No.	Part Description	Dimension	Part No.
③ Pump chain sets, tested. With shackle, One- or Two-strand, different lengths and load capacities		on request	Hose band	2"	2306009
④ Galvanized double nipple	BSP 2" F	2109102		85/20	2308520
Threaded flange	DN 65		STORZ-reducer	B-C	2015423
	BSP 2 1/2" F	2215060		A-B	2015612
⑤ 90° galvanized elbow	BSP 2" F/M	Equipment supplied H 119	Coupling spanner	A, B, C	2016002
	BSP 2 1/2" F/M	Equipment supplied H 121	⑧ 90° galvanized elbow	BSP 2" F	2113606
⑥ STORZ-fixed coupling	C-BSP 2" F	Equipment supplied H 119		BSP 2 1/2" F	2113610
	B-BSP 2 1/2" F	Equipment supplied H 121	⑨ Galvanized pipe union	BSP 2" M/F	2114311
⑦ Synthetic pressure hose with rubber lining and couplings				BSP 2 1/2" M/F	2114312
C – 52 dia.	10 m	2611310	⑩ Bronze non-return valve	BSP 2" F	2211413
	15 m	2611315		BSP 2 1/2" F	2211513
	20 m	2611320	⑪ Galvanized double nipple	BSP 2" M	2009018
	30 m	2611330		BSP 2 1/2" M	2009025
B – 75 dia.	10 m	2611210	⑫ Bronze gate valve	BSP 2" F	2216020
	15 m	2611215		BSP 2 1/2" F	2216025
	20 m	2611220	○ HOMA-Nivomatik float switch level control conversion kit, – for 230-240 V/1Ph		
	30 m	2611230	AZW 10/15	length 15 m	1435155
STORZ-hose-coupling with spigot	C – 52 dia.	2013003	– for 400-415 V/3Ph		
Reinforced hose, per m	B – 75 dia.	2013502	AZD 10/15	length 15 m	1919452
	50 mm dia.	2632050	○ Alarm device AL3 Mains-operated with connector for battery 9V (see below) for mains independent operation with integrated buzzer. Mains connection 230-240 V/1Ph		1586141
	75 mm dia.	2632075	Battery for mains-independent operation 9V		1952215
			Floatswitch MB, mercury free, on or off, with integrated counter weight		
			Cable length	10 m	1465710
				15 m	1465715
			○ HOMA 2 poles earth leakage circuit breaker Fi 16/0,03 A		1561160
			○ Control panel for single or twin pump station for automatic operation		on request



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