

## Submersible drainage pumps jacket cooled for clear water and drainage water.

### H500, H700

#### Application

HOMA H 500 and H 700 are wear resistant submersible pumps, designed for drainage of dirty water, pumping clear water or leakage water, H 500 also for water including abrasive solids. With their small diameter casing and central top discharge the pumps are the ideal solution for operation in narrow wells where conventional submersible pumps would be too large. The water jacket cooled motor with the top discharge protects the motor against overheating even during sip operation. Model B for aggressive liquids, e. g. seawater, alkaline solution.

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. Models with float switch control for automatic pump operation, depending on liquid level in the sump.

**Pumped liquid:** Clear water or drainage water with abrasive (e.g. sand) solids. Max. liquid temperature: 40°C, short term up to 60°C.

**Operation:** Permanent (S1).

#### Design

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

**Pump:** Single stage (H 500) or twin stage (H 700) centrifugal pump with vertical discharge.

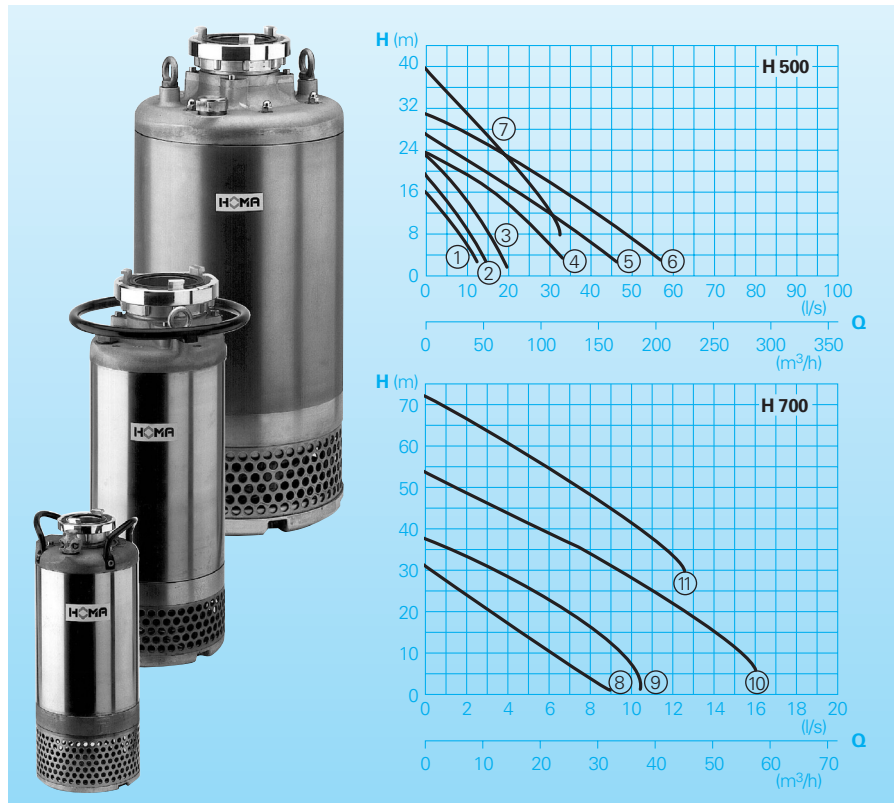
**Impeller:** Open multi-channel impeller, spherical clearance 8-18 mm. The distance between impeller and casing can be readjusted to maintain maximum performance.

**Motor:** Fully submersible, pressure-tight, jacket cooled motor, oil-filled. Insulation class H. Motor protection IP 68. Cable connection chamber totally isolated from motor housing. Thermal sensors embedded in motor winding (types from 5,5D).

**Shaft/Bearing:** Large diameter stainless steel rotor shaft, prelubricated bearings.

**Seals:** Combination of two mechanical seals in a separate oil chamber. Oil check from outside. Electronical seal control optional.

#### Performances



#### Technical Data

Curve No.	Pump type	Motor-output P <sub>2</sub> (kW)	Capacitor* (μF)	Nominal current (A)	Cable	Spherical clearance (mm)	Weight Stand. (B)(kg)
①	H500 (B)/1,8 W (A)	1,5	50	9,2	H07RN-F4G1,5	8	33 (49)
②	H500 (B)/2,5 D (A)	2,4		5,0	H07RN-F4G1,5	10	33 (49)
③	H500 (B)/3,5 D (A)	2,7		6,0	H07RN-F4G1,5	10	39 (57)
④	H500 (B)/5,5 D (A)	4,6		10,7	H07RN-F7G2,5	10	55 (66)
⑤	H500 B/7,5 D (A)	6,6		13,7	H07RN-F7G2,5	15	(109)
⑥	H500 B/10 D (A)	8,5		17,7	H07RN-F7G2,5	15	(113)
⑦	H500 B/10 HD (A)	8,9		18,4	H07RN-F7G2,5	15	(113)
⑧	H700 (B)/2,5 D (A)	2,1		4,8	H07RN-F4G1,5	10	36 (52)
⑨	H700 (B)/3,5 D (A)	3,0		6,4	H07RN-F4G1,5	10	45 (63)
⑩	H700 B/7,5 D (A)	6,6		13,7	H07RN-F7G2,5	10	(123)
⑪	H700 B/10 D (A)	8,9		18,4	H07RN-F7G2,5	10	(127)

**Speed:** 2900 rpm

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

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

**Model B:** For aggressive liquids

**Model A:** With automatic level control HO-MA-Nivomatik

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

#### Materials

Motor housing Model (B)	Aluminium Cast iron	Rotor shaft, screws	Stainless steel
Pressure cover Model (B)	Aluminium additionally NBR rubberized Cast iron	Mechanical seals	Silicon carbide
Motor jacket, suction stainer Model (B)	Stainless steel/ Aluminium Stainless steel	Impeller - up to H500/3,5 - from H500/5,5 - H700	Cast iron EN-GJL-250 Hard casting Cast iron EN-GJL-250
		Pump housing	Cast iron EN-GJL-250
		Seal kit	Perbonane

## Equipment supplied

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

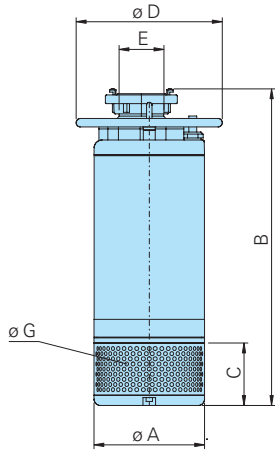
With control box W19 fitted with overload protection, operation capacitor, on-off-switch, 20 m of cable and plug. Pump discharge with STORZ-fixed coupling.

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

With control box D32; DT33 fitted with overload protection, on-off-switch, 20 m of cable and phase inverter. Pump discharge with STORZ-fixed coupling.

**Model A:** Additionally with automatic level control and control box WA20/19; DA20/32(33).

## Dimensions (all dimensions in mm)

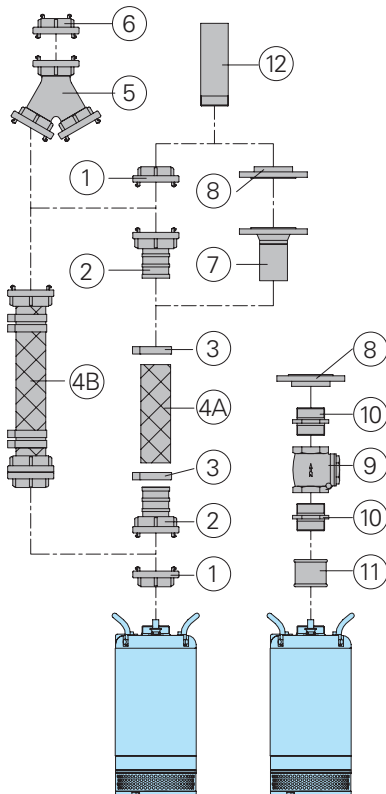


Typ	A	B	C	D max.	G	E	Coupling
H500 (B)/1,8 W	220	502	64	239 <sup>1)</sup>	8	G 2 1/2 AG	STORZ-B
H500 (B)/2,5 D	220	552	114	239 <sup>1)</sup>	10	G 2 1/2 AG	STORZ-B
H500 (B)/3,5 D	220	599	114	239 <sup>1)</sup>	10	G 2 1/2 AG	STORZ-B
H500 (B)/5,5 D	250	654	138	279 <sup>1)</sup>	10	G 4 AG	STORZ-A
H500 B/7,5 D	280	754	126	370 <sup>2)</sup>	15	G 4 AG	STORZ-A
H500 B/10 D	280	760	126	370 <sup>2)</sup>	15	G 6 AG	STORZ-F
H500 B/10 HD	280	747	126	370 <sup>2)</sup>	15	G 3 IG	STORZ-B
H700 (B)/2,5 D	220	552	114	239 <sup>1)</sup>	10	G 2 1/2 AG	STORZ-B
H700 (B)/3,5 D	220	599	114	239 <sup>1)</sup>	10	G 2 1/2 AG	STORZ-B
H700 B/7,5 D	280	794	158	370 <sup>2)</sup>	10	G 3 IG	STORZ-B
H700 B/10 D	280	794	158	370 <sup>2)</sup>	10	G 3 IG	STORZ-B

<sup>1)</sup> with double handle

<sup>2)</sup> with support ring <sup>3)</sup> with lifting ring

## Accessories



Part description	Dimension	Part No.	Part description	Dimension	Part No.
① STORZ coupling		Equipment supplied	⑦ Flanged spigot	DN 65/ 75 mm	2171013
② STORZ-hose coupling with long spigot	B- 75 mm A-110 mm F-150 mm	2013502 2013801 2013901	DN for hose (inner dia.)	DN100/110 mm	2171015
③ Hose-band	S 85/20 S 117/25 S 168/30	2308520 2311520 2317520	⑧ Screwed flange	DN 65/R 2 1/2" F DN 80/R 3" F DN 100/R 4" F DN 150/R 6" F	2215060 2215080 2215100 2215150
④A Rubber fabric hose	Ø 75 mm Ø 110 mm Ø 150 mm	2632075 2632110 2632150	⑨ Non-return valve, bronze	BSP 2 1/2" F BSP 3" F BSP 4" F	2211513 2211613 2211713
④B Synthetic pressure hose with rubber lining, and couplings	B-75 10 m 15 m 20 m 30 m A-102 10 m 15 m 20 m 30 m	2611210 2611215 2611220 2611230 2611110 2611115 2611120 2611130	⑩ Galvanized double nipple	BSP 2 1/2" M BSP 3" M BSP 4" M	2009025 2128030 2009040
⑤ STORZ-twin-inlet with non-return valve	A-2B	2016612	Reduction nipple	BSP 3" MxR2 1/2" F	2102302
⑥ STORZ-reducer	B-C A-B F-A	2015423 2015612 2015622	⑪ Galvanized double nipple (not for pumps with F-Discharge)	BSP 2 1/2" F BSP 4" F	2102215 2211710
			Union piece	BSP 6" M – R6" F	7323955
			⑫ Pipelines, elbows, fittings		on request
			○ HOMA-Nivomatik for float switch level control, conversion unit, cable length 20 m	-H500/1,8 W -H500/2,5 – 5,5D H700/2,5 u. 3,5D -H500/7,5D H700/7,5D -H500/10 (H)D H700/10 D	1435175 1925452 1930452 1940452
			○ Control panel for pump stations and for H500/25 D		on request

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