

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

H 163 – H 179

Application

HOMA H 163 up to H 179 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, for supply of industrial water, applications on board ships etc.

Installation: Permanent with auto-coupling system or transportable with ring base stand.

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

Design

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

Pump: Single stage centrifugal pump with horizontal discharge.

Impeller: Open multichannel impeller, spherical clearance 25 – 35 mm. The distance between impeller and casing can be readjusted to maintain maximum performance.

Motor: Fully submersible, pressure tight electric motor. Thermal sensor embedded in motor winding. Insulation class F. Motor protection IP 68.

Cable:

H 163, H 165

standard: H07RN-F10G1.5

Ex: H07RN-F10G1.5 PLUS

U standard: H07RN-F7G1.5 + H07RN-F5G1.5

U Ex: H07RN-F10G1.5 PLUS + H07RN-F4G1.5 PLUS

H 172

standard / U standard: H07RN-F10G2.5

Ex / U Ex: H07RN-F10G2.5 PLUS

H 175 – H 179

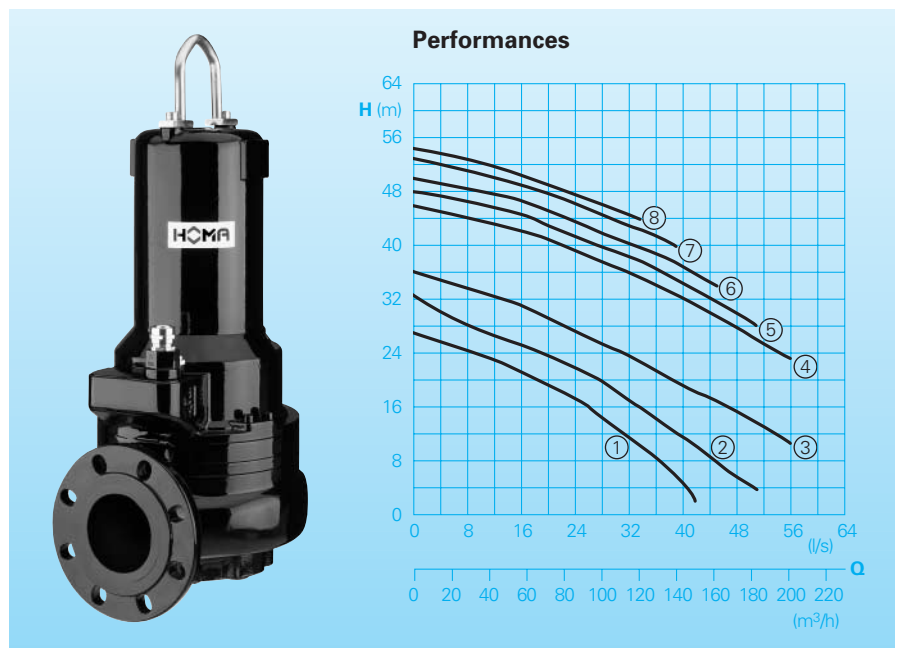
standard / U standard: H07RN-F10G4

Ex / U Ex: H07RN-F4G4 PLUS +

H07RN-F4G1.5 PLUS

Shaft/Bearing: Large diameter stainless steel rotor shaft, pre-lubricated bearings.

Seals: Combination of two mechanical seals in a separate oil chamber. Oil inspection from outside. Electrical seal control optional.



Technical Data

Curve No.	Pump type	Motor input P ₁ (kW)	Motor output P ₂ (kW)	Voltage 50 Hz (V)	Nominal current (A)	Spherical clearance (mm Ø)	Weight (kg) Dry-well	Weight (kg) Wet-well
①	H 163 (U)D(Ex)	11	9,5	400	18,8	25	117	120
②	H 165 (U)D(Ex)	11	9,5	400	18,8	25	117	120
③	H 172 (U)D(Ex)	22	19,6	400	36,9	30	180**	192**
④	H 175 (U)D(Ex)	28	25,4	400	46,3	35	200**	212**
⑤	H 176 (U)D(Ex)	28	25,4	400	46,3	35	200**	212**
⑥	H 177 (U)D(Ex)	28	25,4	400	46,3	35	200**	212**
⑦	H 178 (U)D(Ex)	28	25,4	400	46,3	35	200**	212**
⑧	H 179 (U)D(Ex)	28	25,4	400	46,3	35	200**	212**

Discharge: DN 100

Speed: 2900 rpm

Other voltages are available upon request

Model U: With cooling jacket

Model Ex: Explosion proof

Motorjacket: All models are available with jacket cooling for dry well installation or not fully submerged operation.

Explosion protection: All models are available with explosion proof motors according to Ⓜ II 2 G EEx d [ib] IIBT4 or Ⓜ II 2 G EEx de [ib] IIBT4.

Materials:

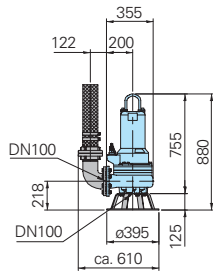
Pump housing, motor housing	Cast iron GG 25
Impeller, suction sieve	Hard casting CrMo C 455
Rotor shaft, screws, cooling jacket	Stainless steel
Mechanical seals	Silicium-carbidel Silicium-carbide
Seal kit	NBR

Equipment supplied

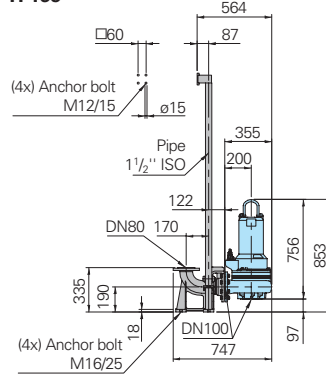
Pump with 10 m cable.

Dimensions

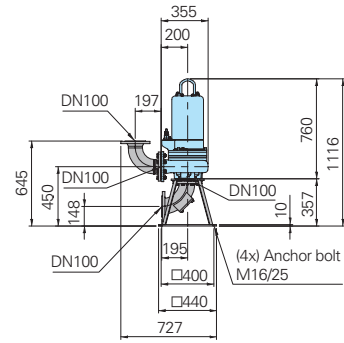
Installation with ring base stand H 163 – H 165



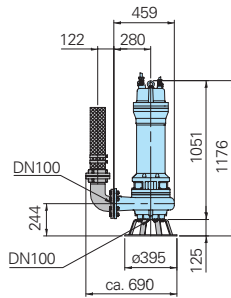
Installation with auto-coupling system H 163 - H 165 DN 80



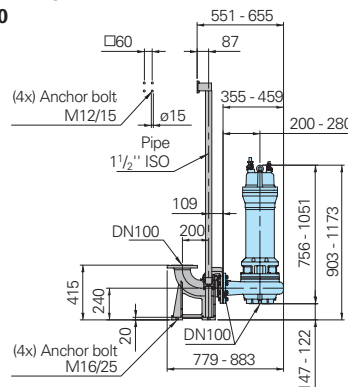
Vertical dry well installation (horizontal installation on request) H 163 – H 165



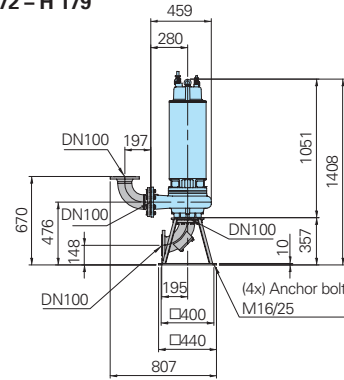
H 172 – H 179



H 163 - H 179 DN 100

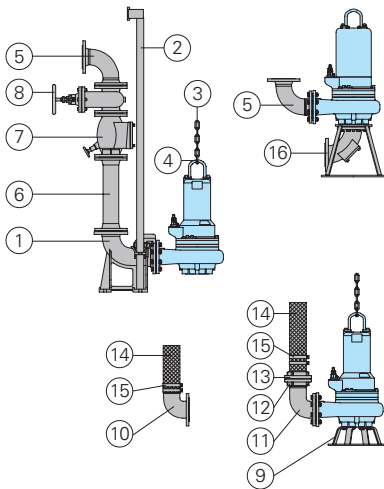


H 172 – H 179



all dimensions in mm

Accessories



Part Description	Dimension	Part No.
① Auto-coupling system with flanged pump coupling and upper slide rail bracket	DN 100/100 DN 80/100 DN 150/100	8604055 8604030 8603632
② Galvanized steel guide rails, pair, per m	1 1/2"	2190155

Part Description	Dimension	Part No.
③ Galvanized steel lifting chain	8 mm Ø 10 mm Ø	2800380 2800410
④ Galvanized steel shackle	1 2	2801380 2801410
⑤ 90 ° flanged elbow	DN 80 DN 100 DN 150	2153302 2153303 2153353
Flanged y-piece for twin pump arrangement		on request
⑥ Flanged discharge pipe, length 1 m	DN 80 DN 100 DN 125 DN 150	2152081 2152201 2152221 2152251
per additional m		on request
⑦ Flanged swing check valve with gasket and fixing bolts	DN 80 DN 100 DN 125 DN 150	2212807 2212809 2212810 2212811
⑧ Flanged gate valve with gasket and fixing bolts	DN 80 DN 100 DN 125 DN 150	2216080 2216100 2216125 2216150
⑨ Ring base stand	DN 100 DN 150	7321215 7321285
⑩ Flanged gate valve with spigot	DN 100 x 4"	6001141

Part Description	Dimension	Part No.
⑪ Flanged to thread elbow	DN 100 x BSP 4" DN 150 x BSP 6"	6001121 6001205
⑫ STORZ-fixed coupling	A-BSP 4" F-BSP 6"	2010701 2010961
⑬ STORZ-hose coupling	B- 75 mm A-110 mm F-150 mm	2013502 2013801 2013901
STORZ-reducer	A – B F – A	2015612 2015622
⑭ Reinforced hose, per m (inner dia.)	75 mm 110 mm 150 mm	2362075 2632110 2632150
Hoses with pre-attached couplings		on request
⑮ Hose bands	S 85/20 S 100/20	2308520 2310020
⑯ Pump stand with suction elbow, cleaning hole, gasket and fixing bolts	DN 100	8604220

Coupling systems, elbows, pipes, fittings (valves, flaps etc.) of **stainless steel** on request.

Electrical and electronical **control panels** for pumps and pump stations with accessories on request.

Sumps of concrete or synthetic material for complete pump stations see special leaflet.

HOMA
P U M P T E C H N O L O G Y

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