

Jacket cooled submersible drainage pumps for chemical aggressive liquids

Chromatic CH 235, CH 291

Application

For irrigation and drainage in chemical aggressive drainage water. Pumping water from sumps, pits and rooms. Drainage disposal in industrial and commercial applications, flood relief.

The water jacket cooled motor with the top discharge protects the motor against overheating even during sip operation.

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

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

Pumped liquid: Clear water or drainage water containing soft solids, up to 10mm grain size pH-value 5 – 12. Max. liquid temperature: 35°C, short term up to 60°C.

Operation: Intermittent.

Design

Fully submersible drainage pump consisting of:

Pump: Single stage centrifugal pump with vertical discharge BSP 1 1/4". Discharge connection with integrated non-return valve.

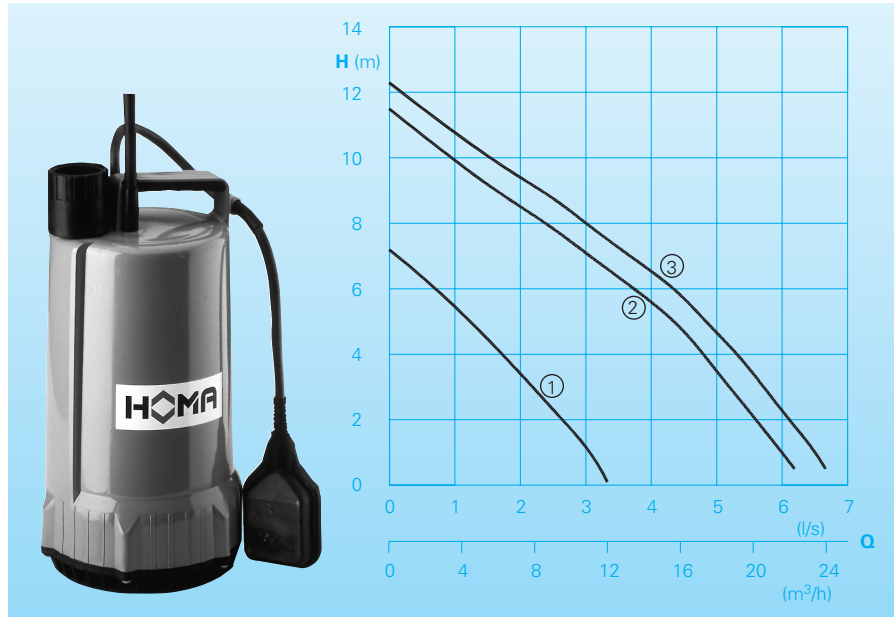
Impeller: Open multi-channel impeller, spherical clearance 10 mm.

Motor: Fully submersible, pressure tight electric motor. Stainless steel motor housing. Insulation class F. Motor protection IP 68. W-models with thermal sensors imbedded in the motor winding.

Cable: H05BQ-F4G1

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

Seals: Mechanical seal.



Technical Data

Curve No.	Pump type	Motor P ₁ (kW)	Motor P ₂ (kW)	Voltage 50 Hz (V)	Nominal current (A)	Cable type	Weight (kg)
①	CH 235 W(A)	0,35	0,18	230/1Ph	1,8	H05BQ-F4G1	4,6
②	CH 291 W(A)	1,2	0,91	230/1Ph	5,0	H05BQ-F4G1	8,3
③	CH 291 D(L)	1,1	0,86	400/3Ph	2,0	H05BQ-F4G1	8,3

Speed: 2900 rpm

Discharge: BSP 1 ¼ F

Model A: With automatic level control HOMA-Nivomatik

Materials

Motor housing, screws	Stainless steel 1.4304
Motor shaft	Stainless steel 1.4104
Suction sieve, Pump housing	Polypropylene synthetic material (composite)
Impeller, Pressure cover	PBTP, Glass-fibre-reinforced
Mechanical seal	Siliciumcarbide/ Viton
Elastomere	Viton
Cable	Polyurethane

Equipment supplied

Pump with discharge connection BSP 1 1/4" F with integrated non-return valve

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

10 m of cable, control box W/01 with overload protection, on-off-switch and plug.

Model D (400V/3Ph):

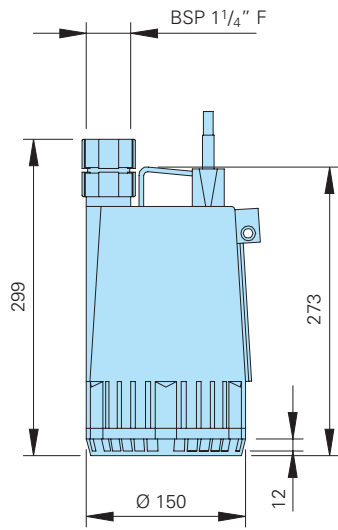
10 m of cable, control box D32 with overload protection, on-off-switch and plug.

Model A: With automatic level control HOMA-Nivomatik, 10 m of cable, control box WA/01 or DA10/32 with overload protection, manual-auto-switch and plug.

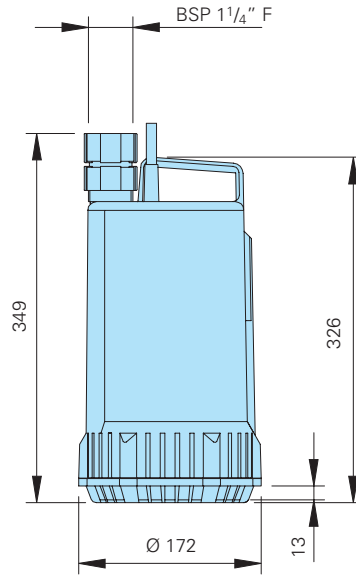
Model DL: With 10 m of cable. Possible control box as accessories available: Model D: DA 10/32

Dimensions and Installations (all dimensions in mm)

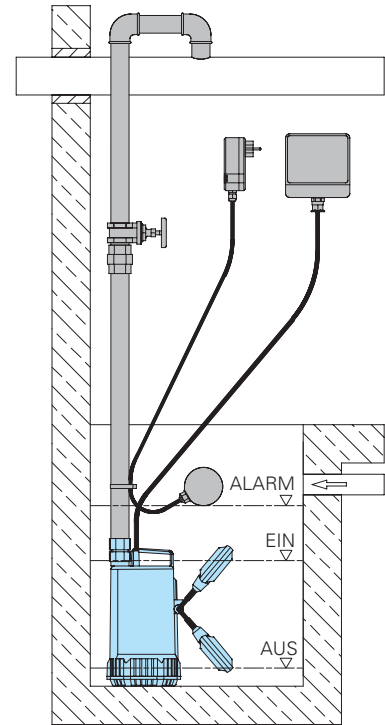
CH 235



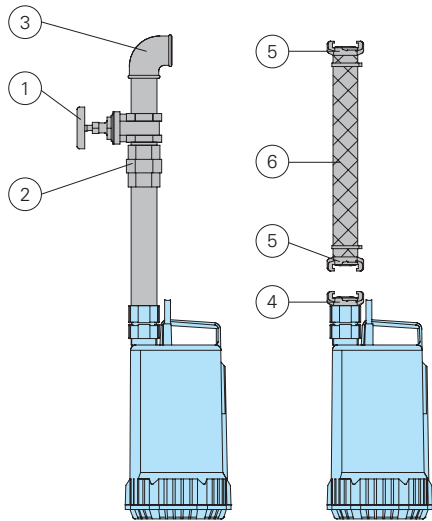
CH 291



Permanent sump installation with pipework, level control and control box



Accessories



Part Description	Dimensions	Part No.
① Bronze gate valve	BSP 1 1/4" F	2216012
② Galvanized pipe union	BSP 1 1/4" M/F	2114304
③ 90° galvanized elbow	BSP 1 1/4" F BSP 1 1/4" F/M	2113604 2111405
T-piece for twin pump arrangement	BSP 1 1/4" F	2114301
○ Bronze non-return valve (if integrated non-return valve is not fitting)	BSP 1 1/4" F	2211213
○ Galvanized double nipple	BSP 1 1/4" M	2009011
④ Brass fixed coupling	BSP 1 1/4" M	2005413
⑤ Brass hose coupling	1" 1 1/4"	2003313 2003413
⑥ PVC hose, per m	1" Ø 25 mm 1 1/4" Ø 30 mm	2621000 2621200
Reinforced hose, per m	1" Ø 25 mm 1 1/4" Ø 32 mm	2632025 2632030
Hose band	3/4"-1" 1 1/4"	2302330 2303252
○ Non-return valve, gate valve, fittings made of steady for automatic operation		On request

Part Description	Dimensions	Part No.
○ HOMA-Nivomatik float switch level control, conversion		
- for 230 V/1Ph		
AZW 10/5	5 m cable	1435055
AZW 10/10	10 m cable	1435105
- for 400 V/3Ph		
AZD 10/5	5 m cable	1912452
AZD 10/10	10 m cable	1914452
○ HOMA 2 poles earth leakage circuit breaker		
Fi 16/0,03 A		1561160
○ Alarm device AL3		
Mains-operated with, connector for battery 9V (see below) for mains independent operation with integrated buzzer.		
Mains connection		
230V/1Ph		1586140
Battery for mains-independent operation 9V		1952215
○ Float switch MB, mercury free, on or off; with integrated counter weight.		
Cable length	6 m	1465706
	10 m	1465710
○ Control panel for single or twin pump station for automatic operation		On request



HOMA Pumpenfabrik GmbH
 P.O. Box 2263, 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.homapumpen.com