

Jacket cooled submersible drainage pumps for chemical aggressive mediums

Chromatic[®] 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.

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

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

Operation: Intermittent.

Design

Fully submersible drainage pump consisting of:

<u>Pump</u>: Single stage centrifugal pump with vertical discharge BSP 1 1/4". Discharge connection with integrated nonreturn valve.

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

<u>Motor:</u> Fully submersible, pressure tight electric motor. Stainless steel motor housing. Insulation class F. Motor protection IP 68. 1 ph-models with thermal sensors imbedded in the motor winding. Cable type: H07BQ-F4G1.

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

Seals: mechanical seal.



Stainless steel

Polypropylene

Synthetic mate-

rial (composite)

PBTP-reinforced

synthetic mate-

rial (composite)

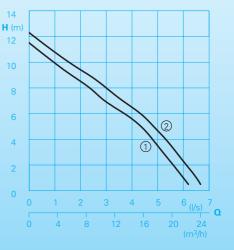
Siliciumcarbide/

Polyurethane

Viton

Viton

Glass-fibre,



Technical Data

Materials:

motor shaft, screws

Motor housing,

Suction sieve,

Pump housing

pressure-cover

Mechanical seal

Elastomere

Cable

Impeller

| Curve No. | Pump type | Motor- input P1 (kW) | Motor- output P2 (kW) | Voltage 50 Hz (V) | Nominal current (A) | Cable type | Weight (kg) | |
|----------------------|--------------|----------------------------|-----------------------------|-------------------------|---------------------------------------|---------------|----------------|--|
| 1 | CH 291 W (A) | 1,2 | 0,91 | 230/ 1ph | 5,0 | H07BQ-F4G1 | 8,3 | |
| 2 | CH 291 D (A) | 1,1 | 0,86 | 400/ 3ph | 2,0 | H07BQ-F4G1 | 8,3 | |
| Speed: 2900 rpm | | | | | Model A: With automatic level control | | | |
| Discharge: BSP 11/4" | | | | | HOMA-Nivomatik | | | |

Equipment supplied

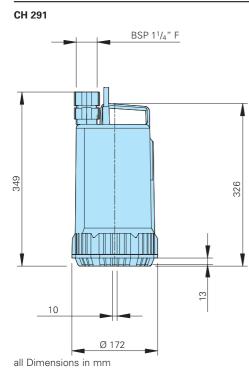
Pump with discharge connection BSP 1 1/4" F with integrated non-return valve.

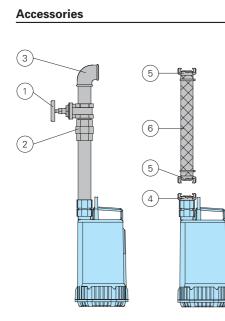
Model W: 10 m of cable, control box with overload protection, on-off-switch and plug.

<u>Model D</u>: 10 m of cable, control box with overload protection, on-off-switch and plug.

<u>Model A</u>: With automatic level control HOMA-Nivomatik, 10 m of cable, control box with overload protection, handauto-switch and plug.

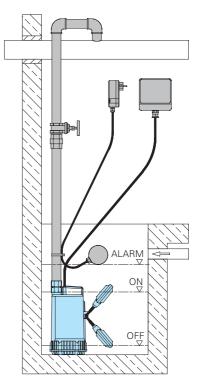
Dimensions and Installations





| Part Description | Dimension | Part. No. |
|--|------------------------------|-----------------------|
| 1) Bronze gate valve | BSP 1 1/4" F | 2216012 |
| ② Galvanized pipe union | BSP 11/4" M/ | F 2114304 |
| 90° galvanized elbow | BSP 11/4" F BSP 11/4" F/N | 2113604 // 2111405 |
| T-piece for twin pump arrangement | BSP 11/4" F | 2114301 |
| O Bronze non-return valve (if integrated non-return valve is not fitted) | BSP 11/4" F | 2211213 |
| ○ Galvanized double nipple | BSP 11/4" M | 2009011 |
| ④ Brass fixed coupling | BSP 11/4" M | 2005413 |
| (5) Brass hose coupling | BSP 1" BSP 11⁄4" | 2003313 2003413 |
| PVC hose, per m | 1"Ø 1¼"Ø | 2621000 2621200 |
| Reinforced hose, per m | 1" Ø 11⁄4" Ø | 2632025 2632030 |
| Hose band | 3/4" - 1" 11/4" | 2302330 2303252 |
| O Non-return valve, gate valve, fittings made of steady for automatic operation | | On request |

Wet well installation with pipework, level control and control box



| Part Description | Dimension | Part. No. |
|---|---------------------------------|--------------------|
| HOMA-Nivomatik float switch level contro conversion unit - for 220-240 V/1ph AZW 10/5 AZW 10/10 | l, length 5 m length 10 m | 1435055 1430105 |
| - for 380-415 V/3ph AZD 10/5 AZD 10/10 | length 5 m length 10 m | 1912452 1914452 |
| ○ HOMA 2 poles earth leakage circuit breaker Fi 16/0,03 A | | 1561160 |
| O Alarm device AL 1 Mains-operated with connector for battery 9V (see below) for mains independent operation with integated buzzer. Mains connection 220-240 V/ 1 ph | J | 1586010 |
| Battery for mains- independent operation | 9 V | 1952209 |
| Float switch MB, mercury free, on or off, with integrated counter weight. Cable length | 6 m 10 m | 1465706 1465710 |
| O Control panel for sing | gle | |
| or twin pump station for automatic operation | | On request |



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