



## Submersible sewage pump with cutting mechanism

# GFZP/GFZF-050-02-N

### Application

These pumps are destined for installation into wet sumps and **for explosion-proof environments.**

Pumps are provided with a cutting mechanism and they are applicable for pumping water with content of scraps of rags in size 50x50mm at most, condoms, sanitary pads, fragmentary, short-fibrous and long-fibrous stuffs, as grass, straw, peels of fruit and vegetable, and so on. These solids can form 5% of volume of a pumped liquid, at most.

**Pumps are not destined for pumping liquids with content of abrasive foreign matters (sand, and so on), cords, synthetic fibres or textiles, and similar stuffs.**

Max. density of a pumped liquid .....1,050 kg.m<sup>-3</sup>

Max. temperature of a pumped liquid  
and ambience .....40°C

Permissible range of pH of a pumped liquid ..... 5 to 9

### Pump sectional view

010	Cutting ring
011	Cutting tool
074	Oil
101	Pump casing
162	Suction cover
230	Impeller
321.1	Bearing
321.2	Bearing
411	Wear ring
412.2	O-ring
412.3	O-ring
420	Radial shaft lip seal ring
433	Mechanical seal
560	Pin
576	Handle
805	Electric motor
811	Motor case
812	Guard hood of motor case
818	Rotor
824.2	Cable
835	Terminal board
901.2	Screw
901.3	Screw
908	Screw
914	Impeller screw
916.1	Sealing screw
916.2	Plug
940	Key

### Technical Description

These pumps are of centrifugal single stage submersible type in close-coupled arrangement, with three-phase asynchronous electric motor.

### Material options

Impeller, suction cover ..... Cast chrome steel 42 2906

Most of stator parts ..... Grey cast iron 42 2415

Cutting mechanism ..... Tool steel 19 733

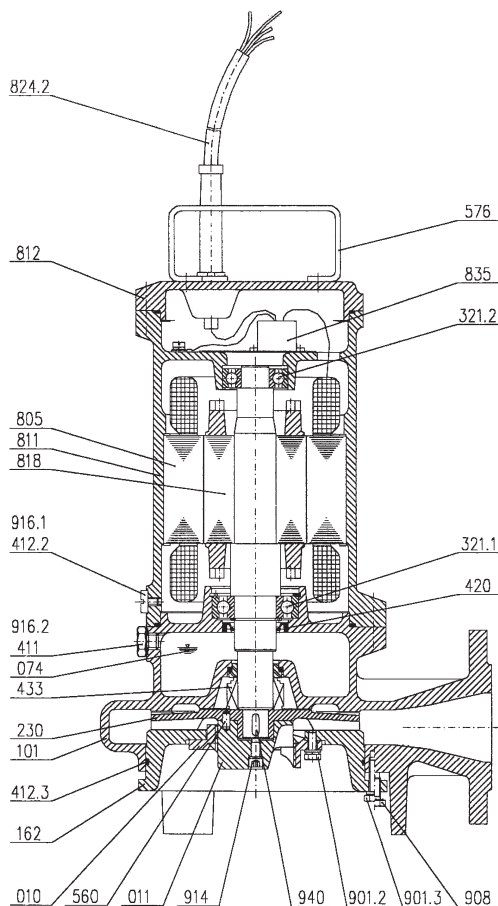
Shaft ..... Stainless steel 17 022

Screws ..... Stainless steel

### Accessories

The pump is delivered including a connected supply cable in length of 10m.

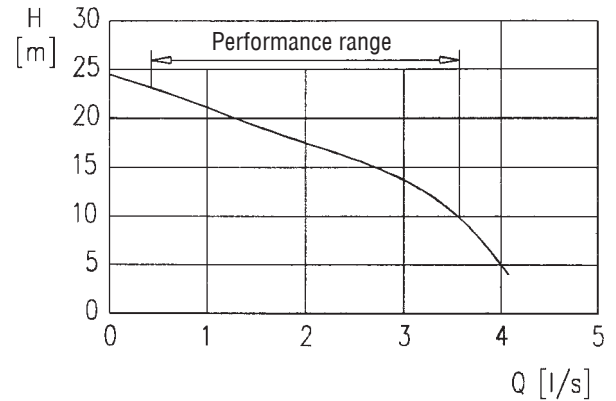
According to the customer request it is possible to deliver a lowering gear or an elbow with a half-coupling for a hose connection.



## Technical data

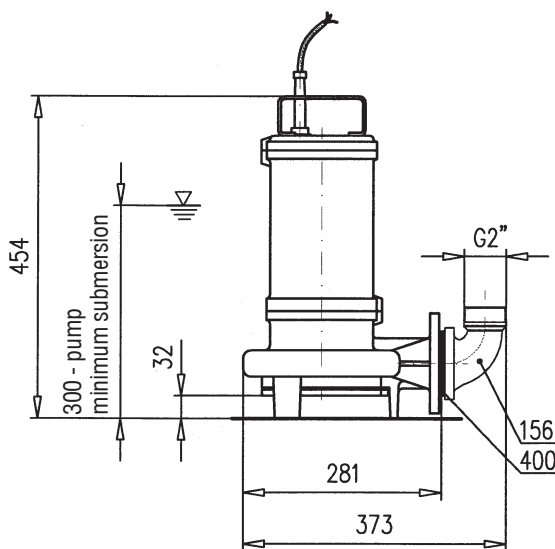
Volume rate of flow Q	l.s <sup>-1</sup>	0.4 - 3.6
Delivery head H	m	23 - 10
Pump set power input P <sub>1max</sub>	kW	2.4
Impeller throughlet	mm	7
Pump weight without a cable	kg	30
Electric motor		definite-purpose
Speed n	min <sup>-1</sup>	2,800
Voltage U	V	400
Frequency f	Hz	50
Breaking current I	A	4.7
Insulation class		F
Motor protection		IP 68
Maximum submersion	m	10
Cable		H07 RN-F4G1.5

## Pump characteristics

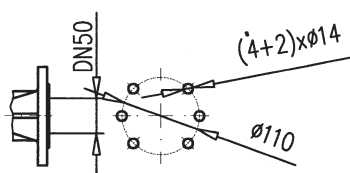


## Pump dimensions

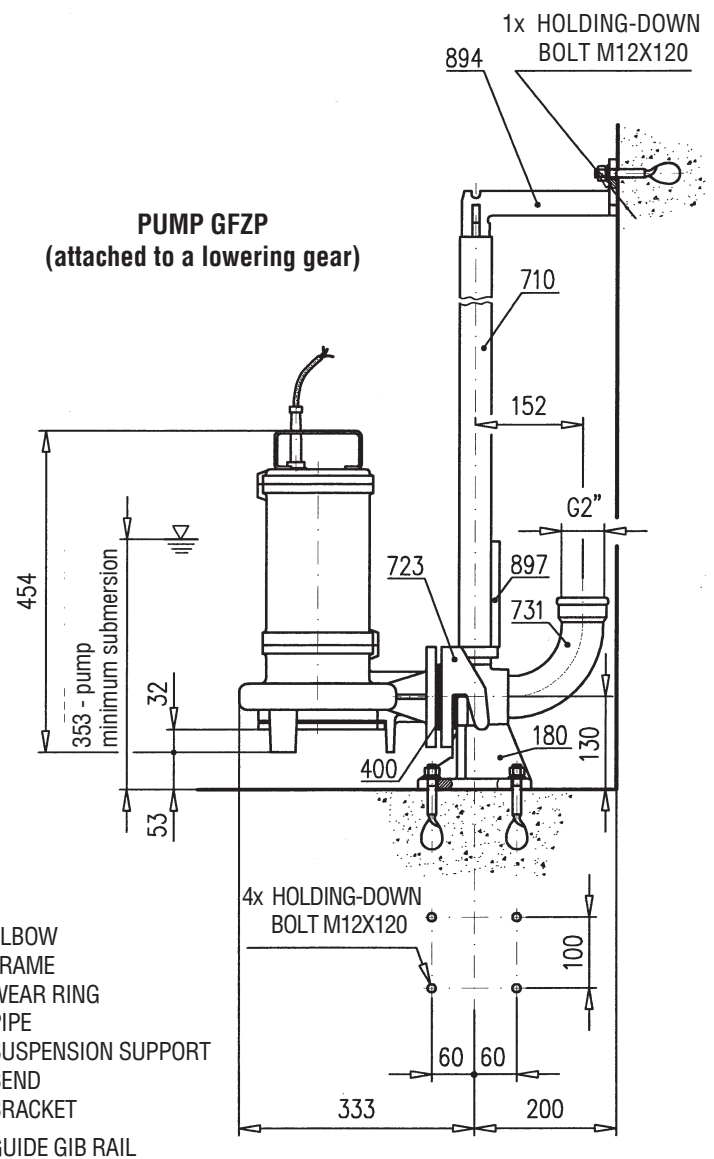
**PUMP GFZF**  
(standing free on the sump bottom)



**PUMP DISCHARGE BRANCH**



**PUMP GFZP**  
(attached to a lowering gear)



- 156 ELBOW
- 180 FRAME
- 400 WEAR RING
- 710 PIPE
- 723 SUSPENSION SUPPORT
- 731 BEND
- 894 BRACKET
- 897 GUIDE GIB RAIL