



# ITT

## ROBOT PUMPS

### Vortex stainless steel pump

### RW2120BH

### 50 Hz

The vortex stainless steel pumps are designed to pump a wide variety of solids contaminated liquids in many applications. Vortex pumps are used for sewage and other waste water applications. The pump can be used in aggressive applications pH = 1-13. Standard elastomers are in FPM (Viton).

#### Pump

solids passage : 65 mm  
 suction diameter : 65 mm  
 discharge diameter : 65 mm  
 impeller diameters : 150-125 mm  
 recommended min. flow : 2 l/s (8 m<sup>3</sup>/h)

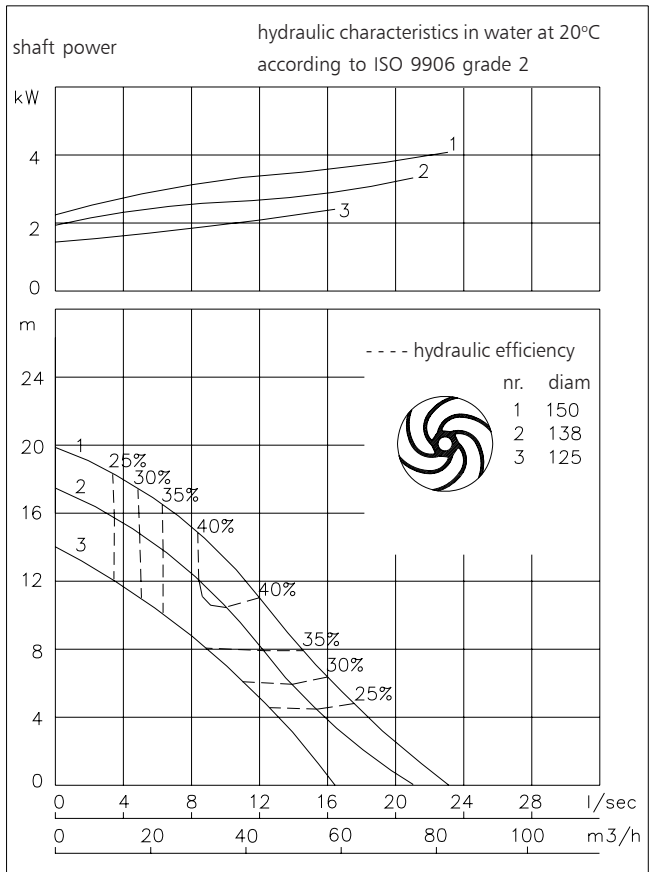
#### Motor

rated shaft power : 4.0 kW  
 rated electrical power : 4.9 kW  
 mains : 50 Hz- 3 phase  
 nominal speed : 2900 rpm  
 rated efficiency : 80 %  
 rated power factor (cos phi) : 0.85  
 degree of protection : IP 68  
 isolation class : H (180 °C)  
 max. water temperature : 40 °C  
 (higher temperatures on request)  
 standard cable length : 10 m

#### Materials

motor housing : 5 6  
 seal housing : 5 6  
 volute : 5 6  
 impeller : 5 6  
 shaft : 5  
 bolts : 5

elastomers : 10  
 electrical cable : 9  
 seal lubrication : oil  
 pump seal : silicon carbide-silicon carbide  
 motor seal : carbon-ceramic



|    |                        |                    |
|----|------------------------|--------------------|
| 1  | cast iron              | EN-GJL-250         |
| 2  | sg cast iron           | EN-GJS-400-15      |
| 3  | stainless steel 431    | X20 CrNi 17 2      |
| 4  | stainless steel 304    | X5 CrNi 18 10      |
| 5  | stainless steel 316    | X5 CrNiMo 17 12 2  |
| 6  | stainless steel 329    | X4 CrNiMoN 27 5 2  |
| 7  | wear resistant sg iron | HB 500             |
| 8  | nitrile                | (NBR)              |
| 9  | neoprene               | (CR)               |
| 10 | viton                  | (FPM)              |
| 11 | Nihard 4               | G-X300CrNiSi 9 5 2 |

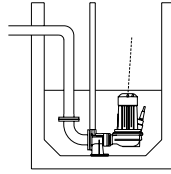
[www.robotpumps.com](http://www.robotpumps.com)

*Engineered for life*



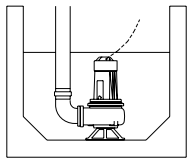
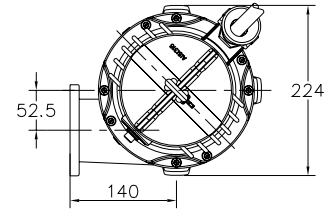
### Installation options

### RW2120BH



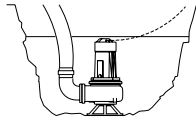
**V**

Guide bar coupling:  
Type V65 or V80



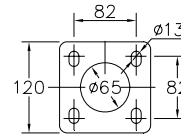
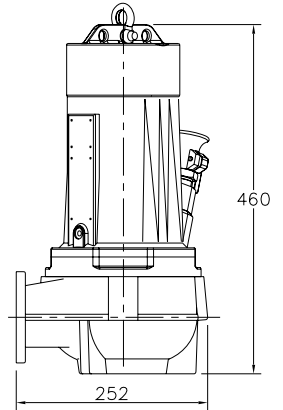
**F**

Freestanding:  
With support and  
75mm hose adapter  
or G3" threaded  
connection



**T**

Transportable:  
With support and  
75mm hose adapter  
or G3" threaded  
connection



The motor is cooled by the surrounding water.

### Version

### Weight

#### BR Basic Stainless Steel

Standard with thermostiches  
All parts in stainless steel 316

43 kg

#### BD Basic Duplex Steel

Standard with thermostiches  
All casted parts in stainless steel 329

43 kg

### Optional:

**Flexible protective sheating for cable**  
(AISI 316)

**Water detector** in motor and oil housing

### Motor connection details

| voltage<br>[V]* | rated<br>current[A] | number of cables x number of cores x cross section [mm <sup>2</sup> ] |          |  |  |
|-----------------|---------------------|---|----------|--|--|
|                 |                     | with waterdetector and/or thermostiches                               |          |  |  |
|                 |                     | DOL-start   | YD-start |  |  |
| 220             | 15.4                | 1x7x2.5   | 1x10x1.5 |  |  |
| 380             | 8.9                 | 1x7x2.5   | 1x10x1.5 |  |  |
| 400             | 8.5                 | 1x7x2.5   | 1x10x1.5 |  |  |
| 415             | 8.2                 | 1x7x2.5   | 1x10x1.5 |  |  |
| 500             | 6.8                 | 1x7x2.5   | 1x10x1.5 |  |  |

starting current DOL-start

: 6.2 x rated current

\* other voltages on request

starting current YD-start

: 2.1 x rated current

We reserve the right to alter specifications without prior notice.