

## Submersible Electric Pumps for clean and slight dirty water

### DIWA Series

Submersible pumps for clean and slight dirty water manufactured in AISI 304 stainless steel. Head up to 20 metres, delivery up to 420 l/min (25,2 m<sup>3</sup>/h). Four basic models with 0,55 to 1,5 kW.

#### DRIVELUB SEAL SYSTEM.

Diffuser plate coated with polyurethane for maximum resistance to abrasion.



#### APPLICATIONS

- Draining of cellars, garages, basements.
- Draining of construction sites.
- Emptying of tanks and reservoirs.
- Lawn and garden irrigation.
- Fountains.
- Pumping of domestic wastewater washing machines, showers, sinks.
- Emptying of tanks in industrial and ecological applications.

#### SPECIFICATIONS

- Liquid **temperature** up to **50°C**.
- **Open impeller**.
- Minimum level of pumped liquid: **25 mm**.
- **Suspended solids handled up to 8 mm in diameter**.
- **Maximum immersion depth: 7 m**.
- **10 metres of H07RN-F** type neoprene power **cord**.
- **Dry motor** (class F insulation) cooled by pumped liquid.

#### • Versions:

- Single-phase: 220-240 V, 50 Hz  
2 poles with built-in thermal protector.
- Three-phase: 220-240 V, 50 Hz  
380-415 V, 50 Hz  
2 poles.

#### • Motor power:

- **0,55 to 1,1 kW** for single-phase version.
- **0,55 to 1,5 kW** for three-phase version.

#### • The single-phase versions features:

- Pre-assembled float** (version without float available on request).
- Built-in capacitor** (except DIWA 11 model with control box on cable).
- Thermal protector**.

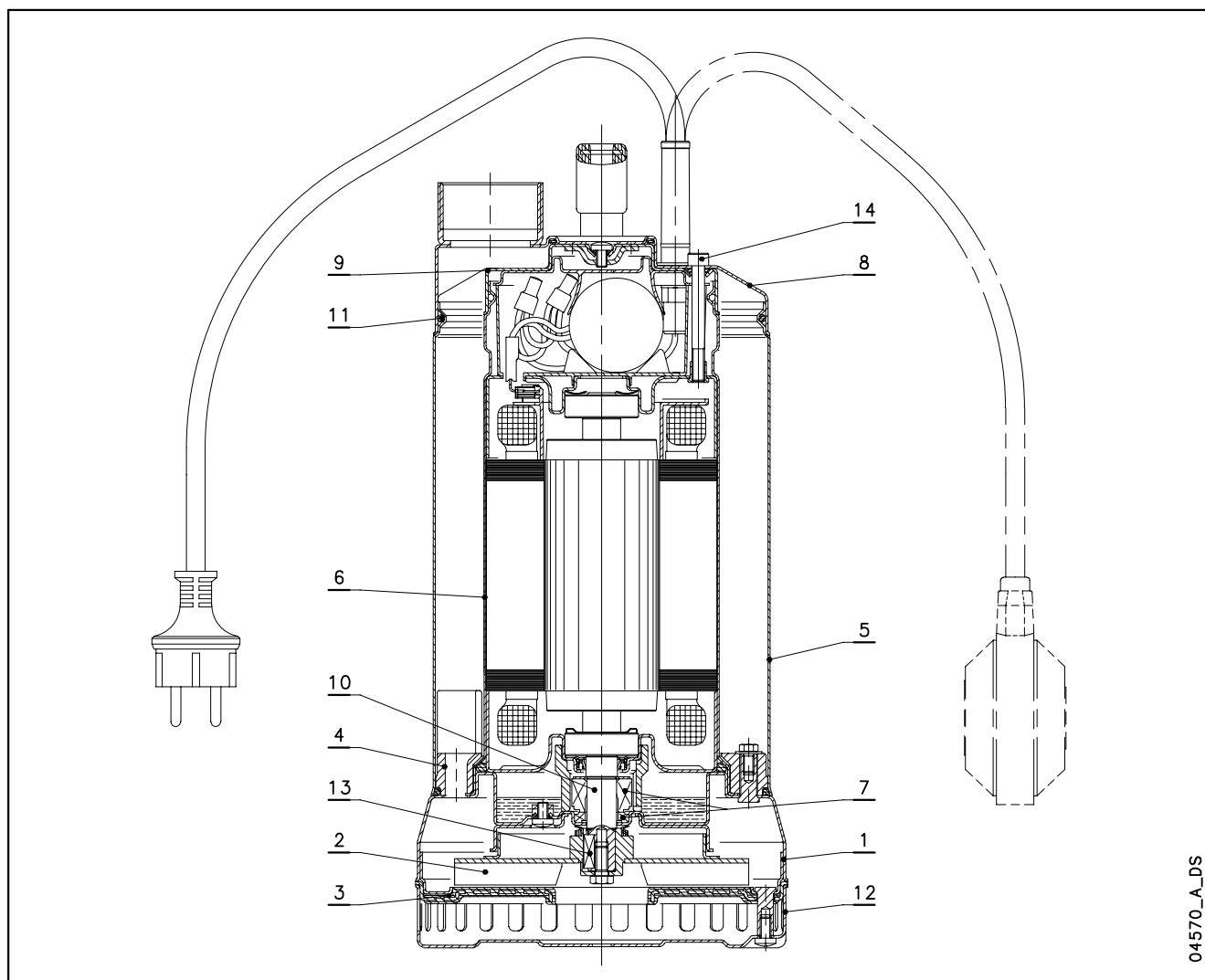
- 60 Hz and versions without float (SG) available.

#### DRIVELUB SEAL SYSTEM

- Waterlight electric motor protected by multiple seal system with **oil chamber**.

A **V-ring** and **silicon carbide mechanical seal** (extremely resistant to wear and abrasion), as well as a **lip seal** which is continuously lubricated by the **DRIVELUB system**, provide an extremely barrier against infiltration.

## DIWA SERIES LIST OF MODELS AND TABLE OF MATERIALS

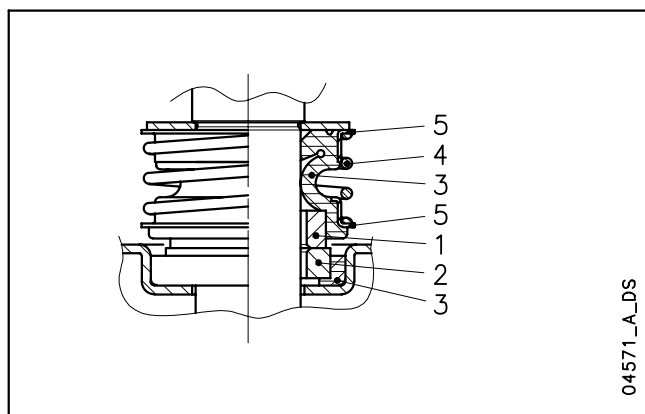


04570\_A\_DS

| REF.<br>N. | NAME            | MATERIAL                                                   | REFERENCE STANDARDS                 |          |
|------------|-----------------|------------------------------------------------------------|-------------------------------------|----------|
|            |                 |                                                            | EUROPE                              | USA      |
| 1          | Pump body       | Stainless steel                                            | EN 10088-1-X5CrNi18-10 (1.4301)     | AISI 304 |
| 2          | Impeller        | Stainless steel                                            | EN 10088-1-X5CrNi18-10 (1.4301)     | AISI 304 |
| 3          | Suction flange  | Stainless steel                                            | EN 10088-1-X5CrNi18-10 (1.4301)     | AISI 304 |
|            |                 | Polyurethane ( LARIPUR 9060 )                              |                                     |          |
| 4          | Diffuser        | ZITEL 70G30                                                |                                     |          |
| 5          | Sleeve          | Stainless steel                                            | EN 10088-1-X5CrNi18-10 (1.4301)     | AISI 304 |
| 6          | Motor casing    | Stainless steel                                            | EN 10088-1-X5CrNi18-10 (1.4301)     | AISI 304 |
| 7          | Mechanical seal | Silicon carbide / Silicon carbide / NBR (standard version) |                                     |          |
| 8          | Cover           | Stainless steel                                            | EN 10088-1-X5CrNi18-10 (1.4301)     | AISI 304 |
| 9          | Upper cover     | Stainless steel                                            | EN 10088-1-X5CrNi18-10 (1.4301)     | AISI 304 |
| 10         | Shaft end       | Stainless steel                                            | EN 10088-1-X5CrNi18-10 (1.4301)     | AISI 304 |
| 11         | Elastomers      | NBR (standard version)                                     |                                     |          |
| 12         | Strainer        | Stainless steel                                            | EN 10088-1-X5CrNi18-10 (1.4301)     | AISI 304 |
| 13         | Key             | Stainless steel                                            | EN 10088-1-X5CrNiMo17-12-2 (1.4401) | AISI 316 |
| 14         | Screws          | Stainless steel                                            | EN 10088-1-X5CrNi18-10 (1.4301)     | AISI 304 |

diwa-en\_a\_tm

## DIWA SERIES MECHANICAL SEAL



## LIST OF MATERIALS

| POSITION 1 - 2       | POSITION 3 | POSITION 4 - 5 |
|----------------------|------------|----------------|
| Q1 : Silicon carbide | P : NBR    | G : AISI 316   |
|                      | V : FPM    |                |

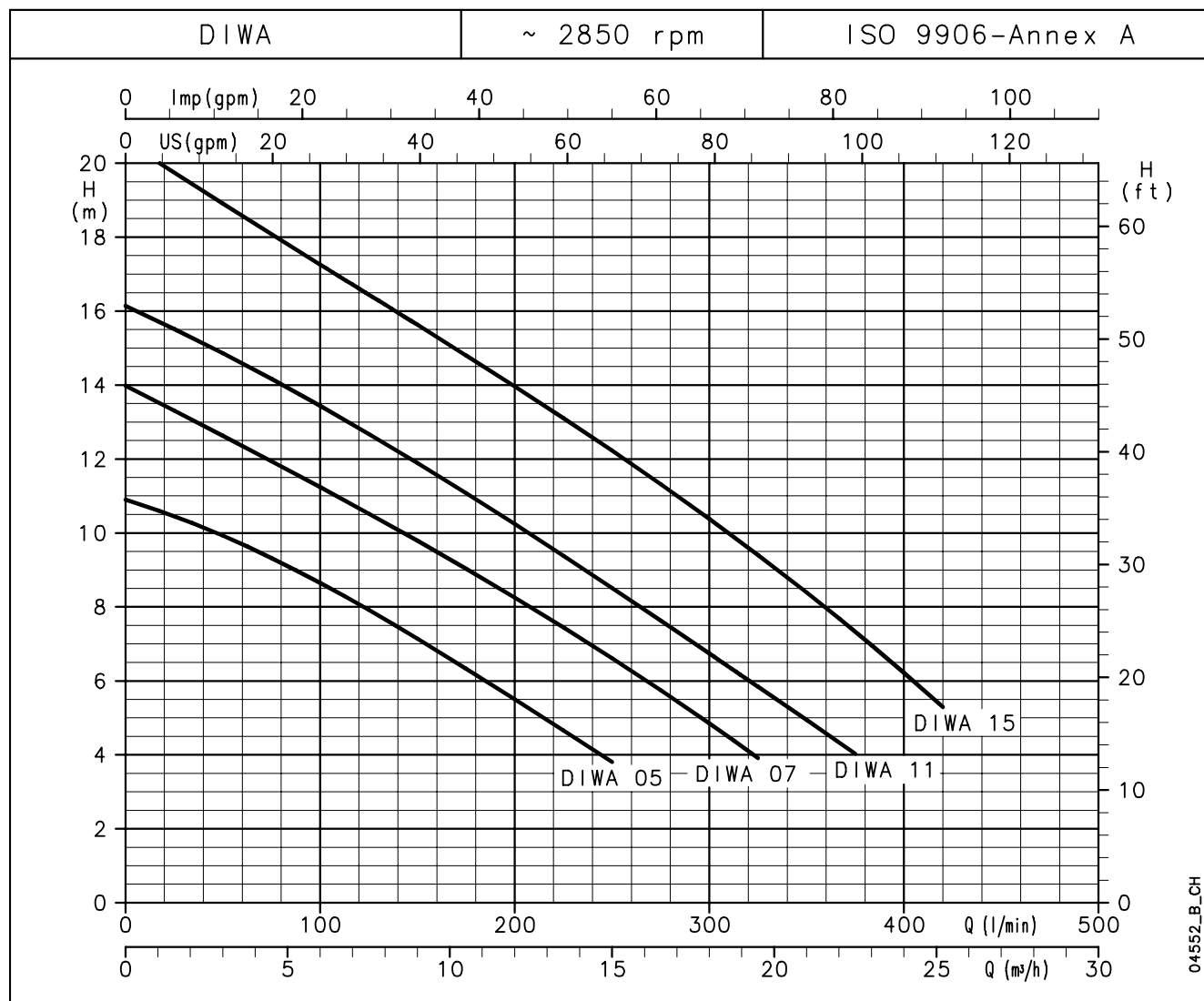
diwa\_ten-mec-en\_a\_tm

## SEAL TYPES

| TYPE                              | POSITION               |                     |                 |              |                       | TEMPERATURE<br>( °C ) |
|-----------------------------------|------------------------|---------------------|-----------------|--------------|-----------------------|-----------------------|
|                                   | 1<br>ROTATING ASSEMBLY | 2<br>FIXED ASSEMBLY | 3<br>ELASTOMERS | 4<br>SPRINGS | 5<br>OTHER COMPONENTS |                       |
| STANDARD MECHANICAL SEAL          |                        |                     |                 |              |                       |                       |
| Q <sub>1</sub> Q <sub>1</sub> PGG | Q <sub>1</sub>         | Q <sub>1</sub>      | P               | G            | G                     | -5 +50                |
| OTHER MECHANICAL SEAL TYPES       |                        |                     |                 |              |                       |                       |
| Q <sub>1</sub> Q <sub>1</sub> VGG | Q <sub>1</sub>         | Q <sub>1</sub>      | V               | G            | G                     | -5 +50                |
|                                   |                        |                     |                 |              |                       |                       |
|                                   |                        |                     |                 |              |                       |                       |

diwa\_tipi-ten-mec-en\_a\_tc

## DIWA SERIES OPERATING CHARACTERISTICS AT 50 Hz



### HYDRAULIC PERFORMANCE TABLE

| PUMP TYPE  | RATED<br>POWER |      | Q = DELIVERY                          |      |      |      |      |      |      |      |      |      |      |     |     |
|------------|----------------|------|---------------------------------------|------|------|------|------|------|------|------|------|------|------|-----|-----|
|            |                |      | l/min                                 | 0    | 100  | 125  | 150  | 175  | 200  | 225  | 250  | 300  | 325  | 375 | 420 |
|            | m³/h           | 0    | 6                                     | 7,5  | 9    | 10,5 | 12   | 13,5 | 15   | 18   | 19,5 | 22,5 | 25,2 |     |     |
|            | kW             | HP   | H = TOTAL HEAD METRES COLUMN OF WATER |      |      |      |      |      |      |      |      |      |      |     |     |
| DIWA 05(T) | 0,55           | 0,75 | 10,9                                  | 8,6  | 7,9  | 7,1  | 6,3  | 5,5  | 4,7  | 3,8  |      |      |      |     |     |
| DIWA 07(T) | 0,75           | 1    | 14,0                                  | 11,2 | 10,5 | 9,8  | 9,0  | 8,3  | 7,4  | 6,6  | 4,8  | 3,9  |      |     |     |
| DIWA 11(T) | 1,1            | 1,5  | 16,1                                  | 13,4 | 12,7 | 11,9 | 11,1 | 10,2 | 9,4  | 8,5  | 6,7  | 5,8  | 4,0  |     |     |
| DIWA 15T   | 1,5            | 2    | 20,6                                  | 17,3 | 16,4 | 15,6 | 14,8 | 14,0 | 13,1 | 12,2 | 10,4 | 9,4  | 7,3  | 5,3 |     |

These performances are valid for liquids with density  $\rho = 1,0 \text{ kg/dm}^3$  and kinematic viscosity  $\nu = 1 \text{ mm}^2/\text{s}$ .

diwa-2p50-en\_a\_th

### ELECTRICAL DATA TABLE

| PUMP TYPE    | ABSORBED POWER* | ABSORBED CURRENT* | CAPACITOR                     |
|--------------|-----------------|-------------------|-------------------------------|
| SINGLE-PHASE |                 | 220-240 V         |                               |
|              | kW              | A                 | $\mu\text{F} / 450 \text{ V}$ |
| DIWA 05      | 0,79            | 3,92              | 16                            |
| DIWA 07      | 1,25            | 6,20              | 22                            |
| DIWA 11      | 1,53            | 6,83              | 30                            |
| -            | -               | -                 | -                             |

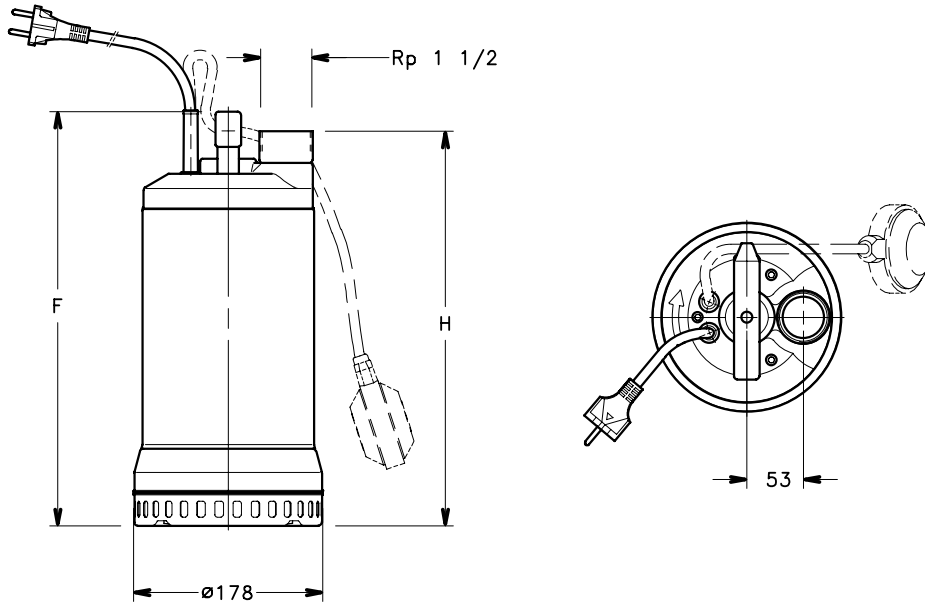
\*Maximum values within operating range

| PUMP TYPE   | ABSORBED POWER* | ABSORBED CURRENT* | ABSORBED CURRENT* |
|-------------|-----------------|-------------------|-------------------|
| THREE-PHASE |                 | 220-240 V         | 380-415 V         |
|             | kW              | A                 | A                 |
| DIWA 05T    | 0,72            | 2,56              | 1,48              |
| DIWA 07T    | 1,2             | 4,26              | 2,46              |
| DIWA 11T    | 1,44            | 4,64              | 2,68              |
| DIWA 15T    | 2,05            | 6,74              | 3,89              |

diwa-2p50-en\_a\_te

## DIWA SERIES DIMENSIONS AND WEIGHTS

DIWA



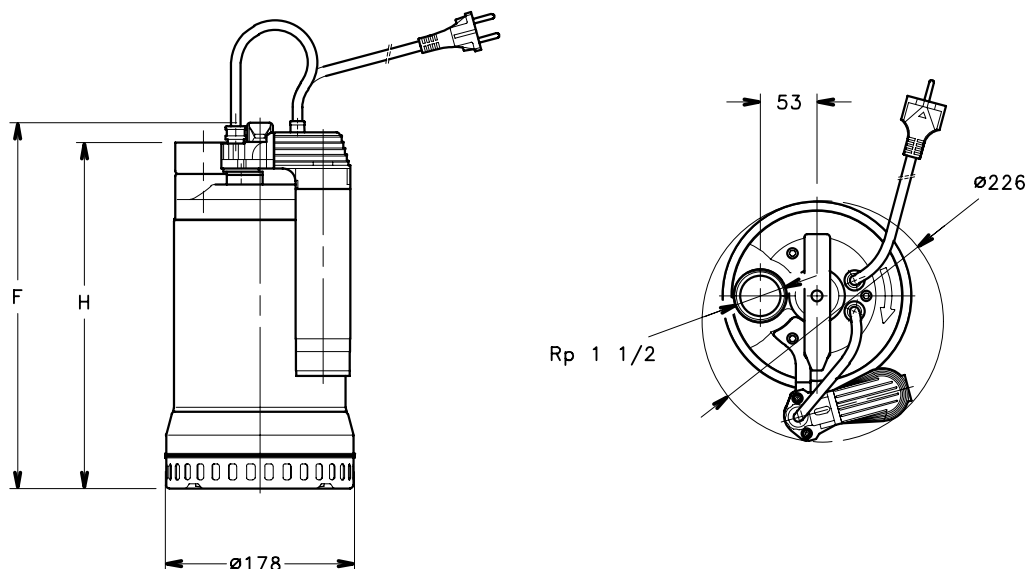
04551\_D\_DD

| PUMP TYPE<br>SINGLE-PHASE |           | DIMENSIONS (mm) |     | WEIGHT |
|---------------------------|-----------|-----------------|-----|--------|
|                           |           | F               | H   | kg     |
| DIWA05                    | DIWA05 GT | 348             | 330 | 12     |
| DIWA07                    | DIWA07 GT | 393             | 375 | 14,3   |
| DIWA11                    | DIWA11 GT | 393             | 375 | 17     |
| -                         | -         | -               | -   | -      |

| PUMP TYPE<br>THREE-PHASE |  | DIMENSIONS (mm) |     | WEIGHT |
|--------------------------|--|-----------------|-----|--------|
|                          |  | F               | H   | kg     |
| DIWA05T                  |  | 348             | 330 | 11     |
| DIWA07T                  |  | 363             | 345 | 13     |
| DIWA11T                  |  | 393             | 375 | 15     |
| DIWA15T                  |  | 393             | 375 | 16,5   |

diwa-2p50-en\_b\_td

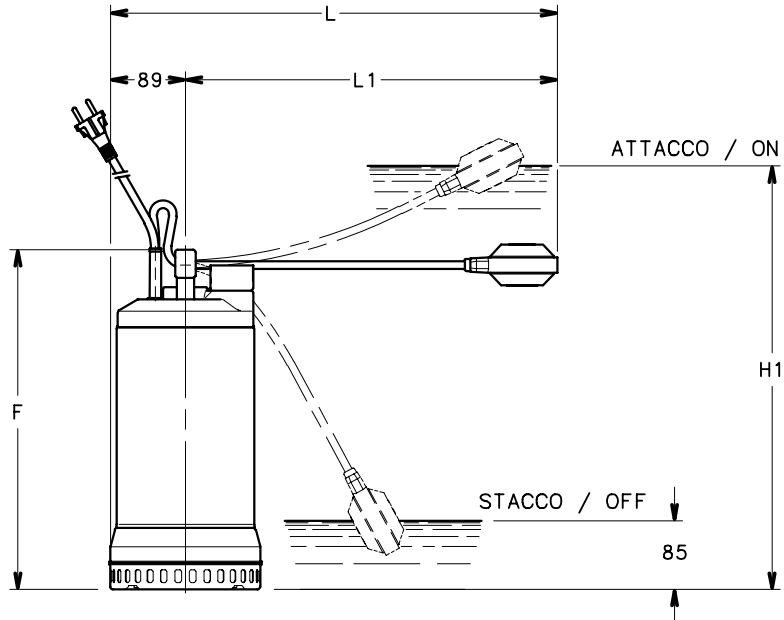
DIWA GT



04559\_A\_DD

## DIWA SERIES INSTALLATION EXAMPLES

DIWA

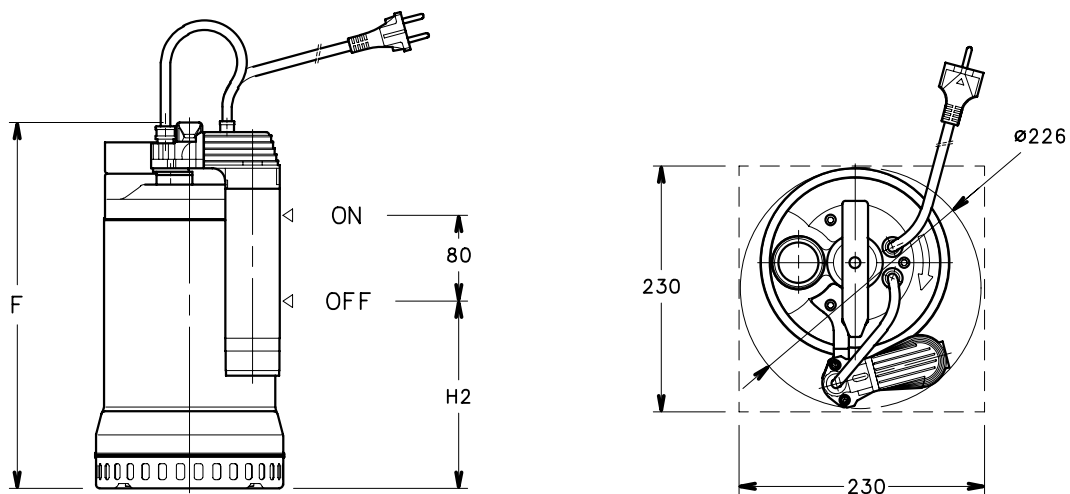


04553\_E\_DD

| PUMP TYPE |           | DIMENSIONS (mm) |     |     |     |     |
|-----------|-----------|-----------------|-----|-----|-----|-----|
|           |           | F               | L   | L1  | H1  | H2  |
| DIWA05    | DIWA05 GT | 348             | 459 | 370 | 430 | 180 |
| DIWA07    | DIWA07 GT | 393             | 514 | 425 | 490 | 180 |
| DIWA11    | DIWA11 GT | 393             | 514 | 425 | 490 | 180 |

diwaliv-2p50-en\_b\_td

DIWA GT



04563\_B\_DD