

Submersible Electric Pumps for clean and slight dirty water

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 m³/h). Four basic models with 0,55 to 1,5 kW.

DRIVELUB SEAL SYSTEM.

Diffuser plate coated with polyurethane for maximum resistance to abrasion.

DIWA Series



APPLICATIONS

- Draining of cellars, garages, basements.
- Draining of construction sites.
- Emptying of tanks and reservoirs.
- Lawn and garden irrigation.
- 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**.

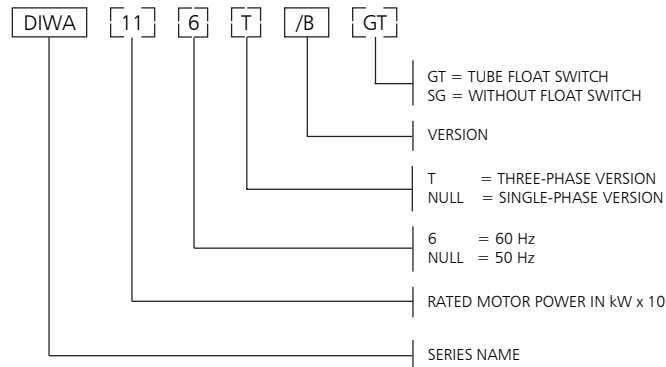
- 60 Hz and versions without float (SG) available.

DRIVELUB SEAL SYSTEM

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

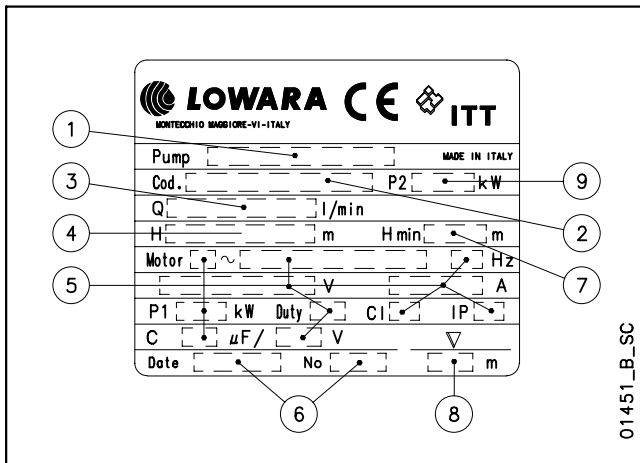
A **V-ring** and **silicon carbide mechanical seal** (extremely resistant to wear and abrasion), as well as a **lip seal** which is continuously lubricated by the **DRIVELUB system**, provide an extremely barrier against infiltration.

DIWA SERIES IDENTIFICATION CODE



EXAMPLE : DIWA 11/B
DIWA Series Electric pump, rated motor power 1,1 kW, 50 Hz version, single-phase, /B version.

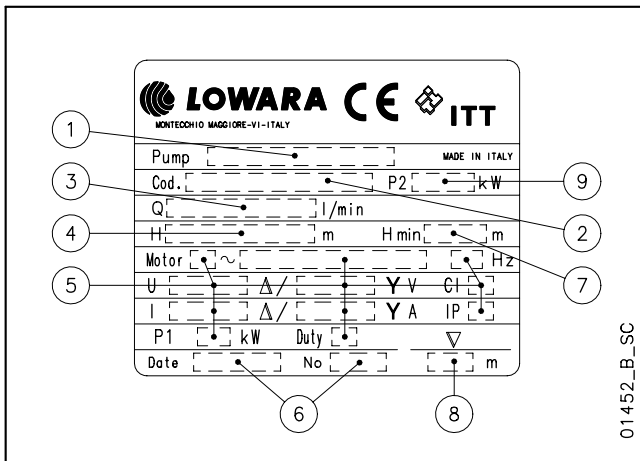
SINGLE-PHASE RATING PLATE



LEGEND

- 1 - Electric pump type
- 2 - Code
- 3 - Delivery range
- 4 - Head range
- 5 - Motor type
- 6 - Date of manufacture and serial number
- 7 - Minimum head
- 8 - Maximum immersion depth
- 9 - Rated output

THREE-PHASE RATING PLATE

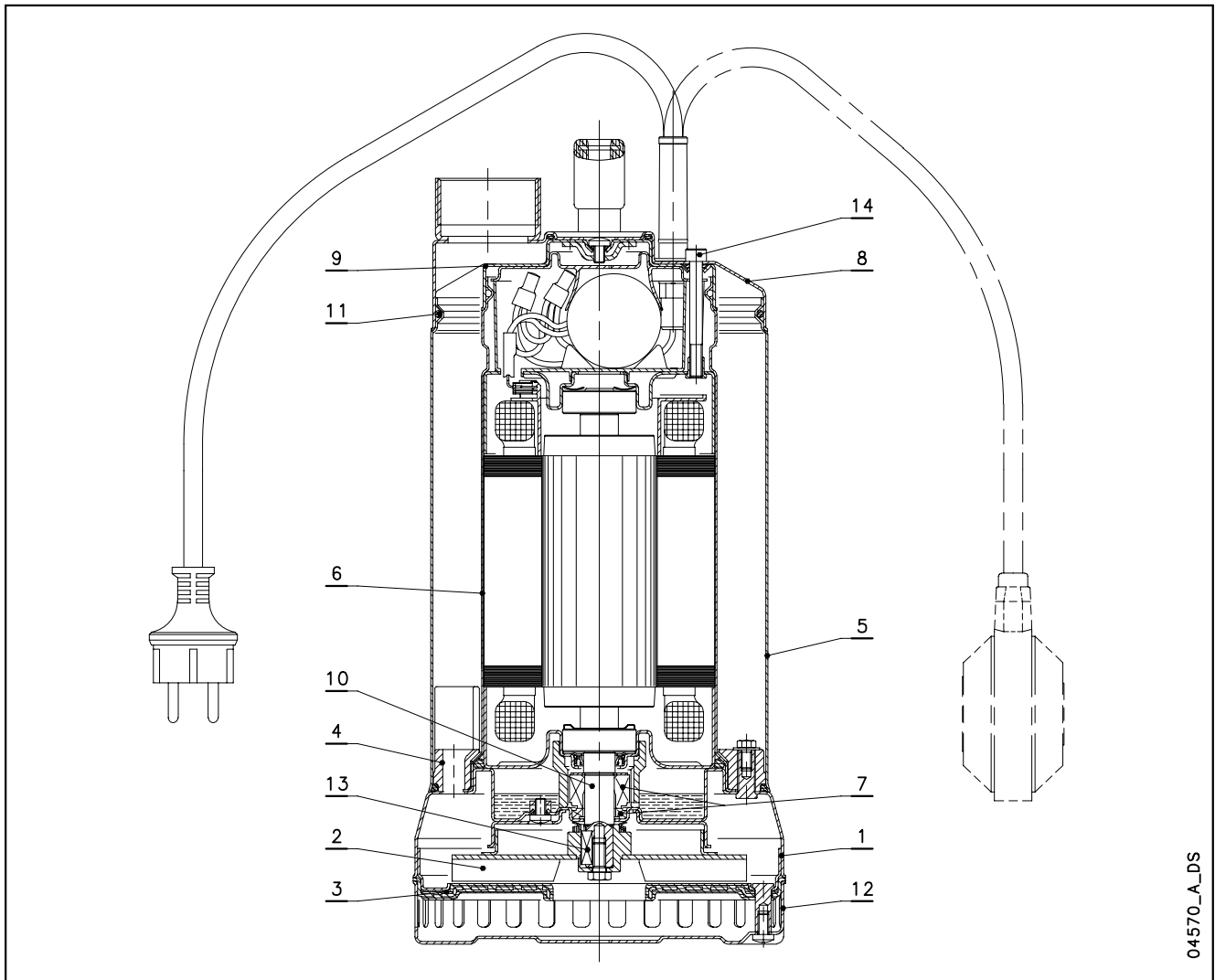




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DIWA SERIES LIST OF MODELS AND TABLE OF MATERIALS



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| REF. 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 |
| | | Thermoplastic polyurethane TPU | | |
| 4 | Diffuser | PA 66 + 30 % GF | | |
| 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 |

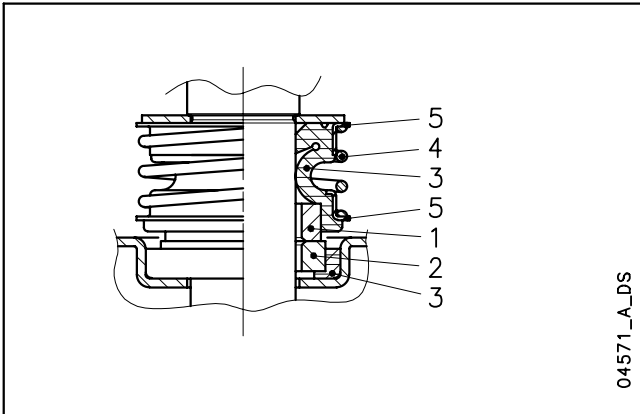
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**DIWA SERIES
MECHANICAL SEAL**



LIST OF MATERIALS

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

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SEAL TYPES

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

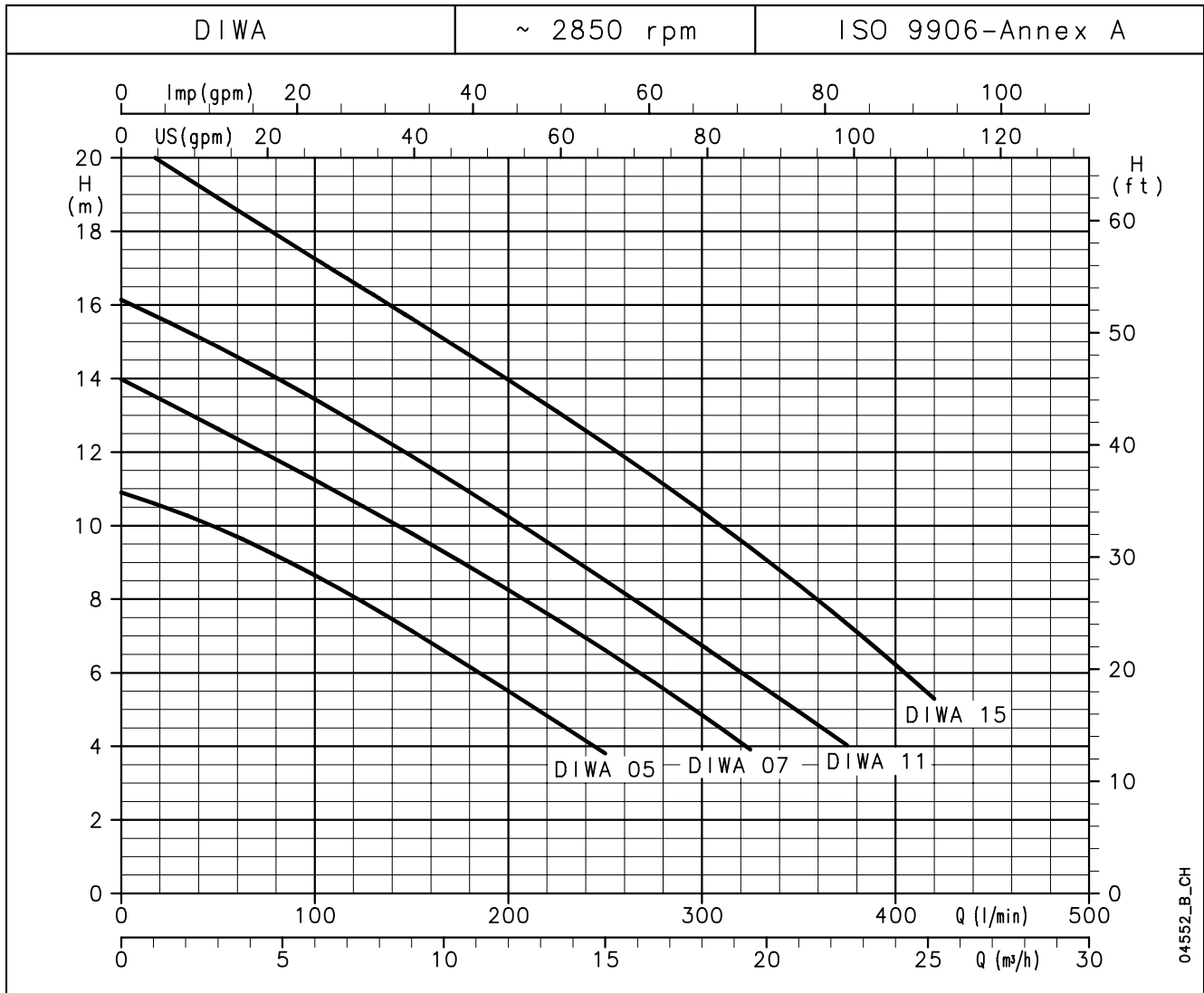
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DIWA SERIES OPERATING CHARACTERISTICS AT 50 Hz



HYDRAULIC PERFORMANCE TABLE

| PUMP TYPE | RATED POWER | | Q = DELIVERY | | | | | | | | | | | | |
|------------|-------------|---------------------------------------|-------------------|------|------|------|------|------|------|------|------|-----|------|------|------|
| | | | l/min | 0 | 100 | 125 | 150 | 175 | 200 | 225 | 250 | 300 | 325 | 375 | 420 |
| | | | m ³ /h | 0 | 6 | 7,5 | 9 | 10,5 | 12 | 13,5 | 15 | 18 | 19,5 | 22,5 | 25,2 |
| | | H = TOTAL HEAD METRES COLUMN OF WATER | | | | | | | | | | | | | |
| | kW | HP | | | | | | | | | | | | | |
| 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 $\nu = 1 \text{ mm}^2/\text{s}$.

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ELECTRICAL DATA TABLE

| PUMP TYPE | ABSORBED POWER* | ABSORBED CURRENT* | CAPACITOR |
|--------------|-----------------|-------------------|-------------------------------|
| SINGLE-PHASE | kW | 220-240 V 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 |
| - | - | - | - |

| PUMP TYPE | ABSORBED POWER* | ABSORBED CURRENT* | ABSORBED CURRENT* |
|-------------|-----------------|-------------------|-------------------|
| THREE-PHASE | kW | 220-240 V A | 380-415 V 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 |

*Maximum values within operating range

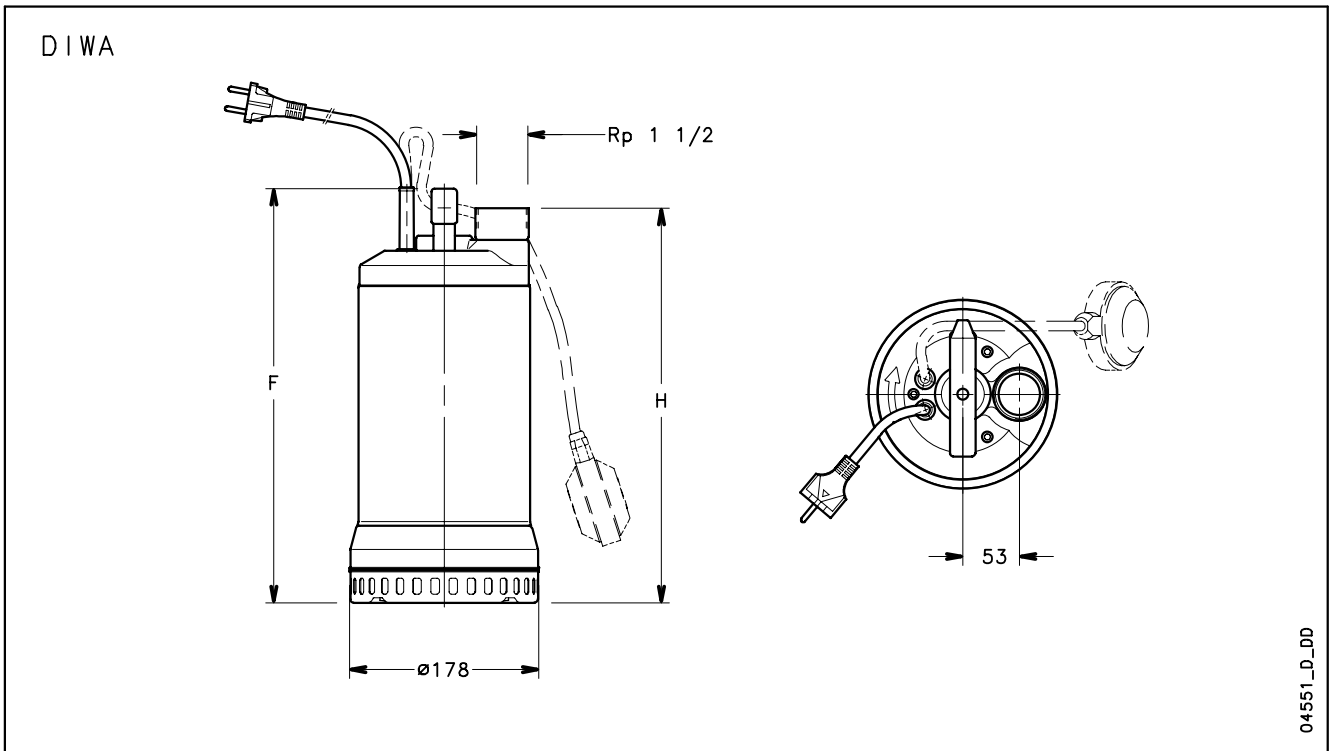
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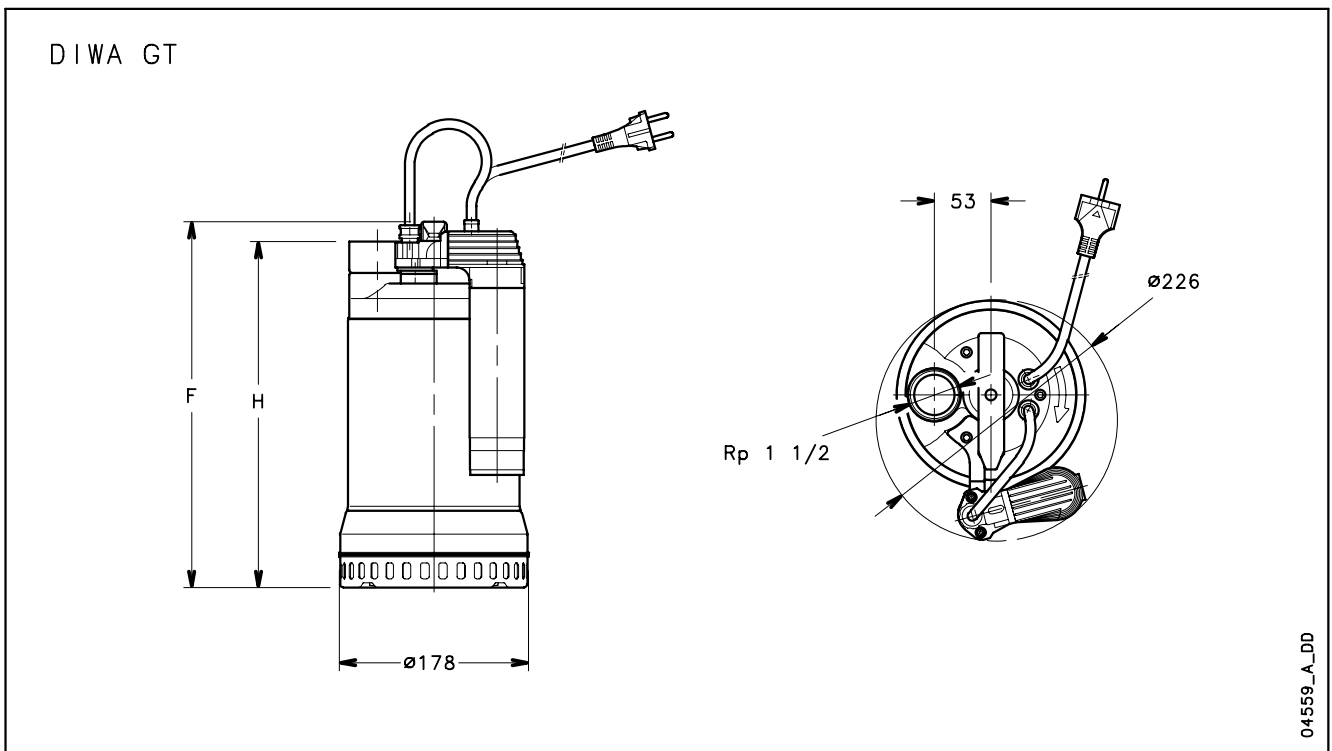
DIWA SERIES DIMENSIONS AND WEIGHTS



| PUMP TYPE 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 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 |

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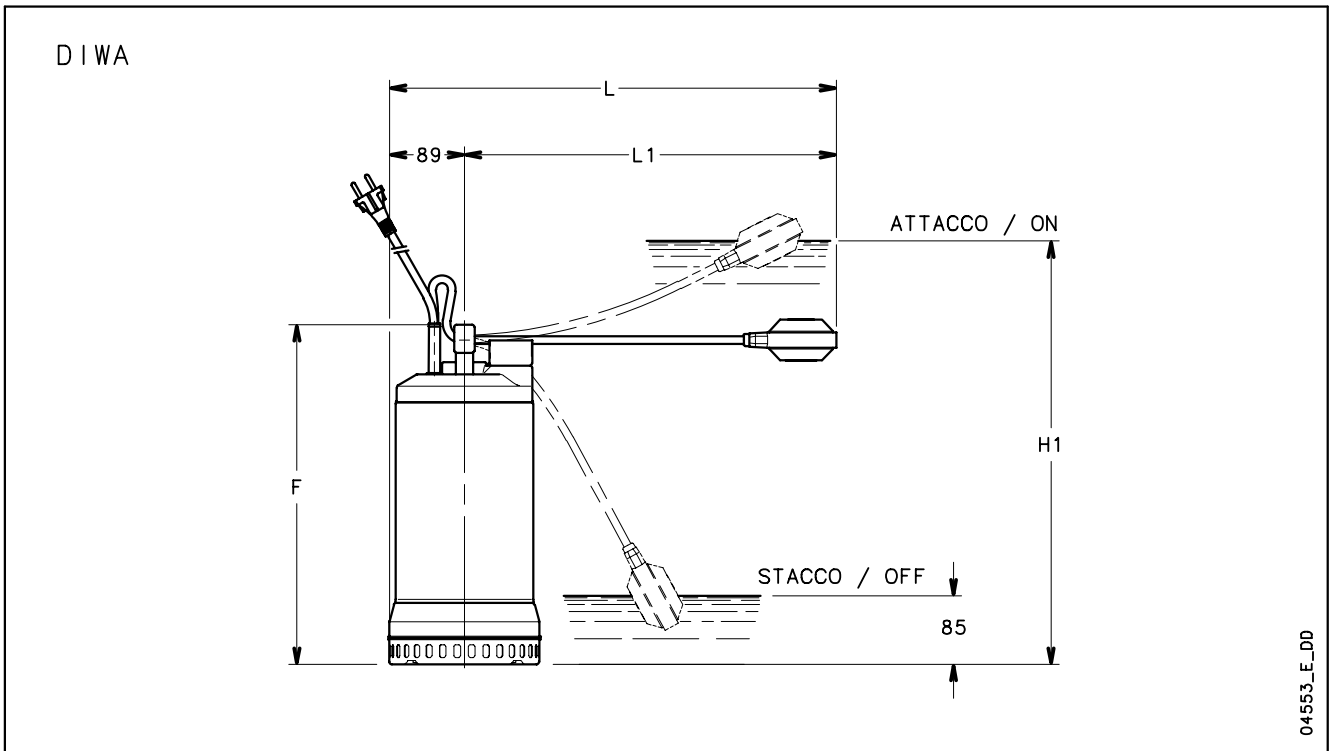




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DIWA SERIES INSTALLATION EXAMPLES



| 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 |

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