Manufactured at our main plant, these ranges of immersion pumps are the result of extensive product and process evaluation by our research and development department. They are a true FLUX product, from conception through to manufacture, assembly and testing. Their design philosophy, and the materials selected for their construction make them ideal for applications in the chemical industry, surface treatment, electroplating, printed circuit manufacturing, water treatment and wastewater treatment. FLUX centrifugal immersion pumps can be used whenever liquids have to be transferred or circulated. They are suitable for use with a wide variety of acids and alkalis as well as other chemicals, typically coolants, lubricants and non-flammable solvents.

With delivery rates of up to 74 m³/h and delivery heads of maximum 35 m water column, FLUX centrifugal immersion pumps combine maximum efficiency with a robust and reliable construction, resulting in a pump that provides the ultimate in process security. These are features that you can rely on, each hour, 24 hours a day.

The mechanical seal types F 620 and F 640 are designed for typical liquid transfer operations, with either stationary or portable variants. These units compliment the well-proven barrel pumps range and have a higher output and kW-rating.

Top of the range, are the sealless units, these pumps complete the range of high output, high reliability immersion pumps. Designed for continuous use with a wide range of aggressive liquids, from acids to alkalis, the range includes the type F 706 – with only a sleeve bearing in contact with the liquid – or the types F 716 and F 726 - with a suspended free-flying shaft and no bearings or seals in contact with the liquid.

Three-phase drive motors are available as matched power units in kW-ratings from 0,37 to 5,5 kW, protected to IP 55 as well as explosion-proof to EEx e II T3 for models F 620, F 640, F 706 and F 726.

With immersion lengths from 300 to 4000 mm almost every application requirement can be met. The use of high-class materials such as Hastelloy C and polyvinylidenfluoride, together with polypropylene and stainless steel, are combined with design experience perfected over decades of pump manufacturing. This guarantees the long service life of FLUX centrifugal immersion pumps.

Detailed information and performance charts are shown on the following pages.

To receive a quotation compiled to your application, please could you to fill in the questionnaire on page 22.2 and return it to us.
Save, powerful, reliable –
The new FLUX range

With 4 different design formats within the vertical centrifugal immersion pump range FLUX offer a cost effective, reliable solution for many liquid transfer and circulating operations. With these pumps FLUX meet the requirements of the market with their forward-looking designs and the manufacture of high quality products.

**Type F 620 and F 640:** with mechanical seal in vertical and horizontal version

**Type F 706:**
4 different sizes, sealless design with sleeve bearing, immersion length up to 2000 mm

**Type F 716:**
compact design requires little space for installation, version with support tube or support bars for continuous use, suitable for dry operation

**Type F 726:**
very robust construction with shaft bearing located in a pedestal, version with support bars for continuous use, suitable for dry operation
Introduction
Table of contents

FLUX Centrifugal Immersion Pumps F 620 S
size 15 and 30 in stainless steel
for delivery rates of up to 23 m³/h

FLUX Centrifugal Immersion Pumps F 640 PP
size 15, 30, 15 Z and 30 Z in polypropylene
for delivery rates of up to 34 m³/h

FLUX Centrifugal Immersion Pumps F 640 PP and F 640 PVDF
size 185 and 230 in polypropylene
or polyvinylidenfluoride
for delivery rates of up to 42 m³/h

FLUX Centrifugal Immersion Pumps F 620 S TR and F 640 PP TR
for dry installation
for horizontal use
for delivery rates of up to 44 m³/h

FLUX Centrifugal Immersion Pumps F 706 PP
size 135, 185, 230 and 350 in polypropylene
for delivery rates of up to 74 m³/h

FLUX Centrifugal Immersion Pumps F 716 PP and F 716 PVDF
size 115 and 135 in polypropylene
or polyvinylidenfluoride
for delivery rates of up to 12 m³/h

FLUX Centrifugal Immersion Pumps F 716 PP and F 716 PVDF
size 185 and 230 in polypropylene
or polyvinylidenfluoride
for delivery rates of up to 45 m³/h

FLUX Centrifugal Immersion Pumps F 726 PP and F 726 PVDF
size 115 and 135 in polypropylene
or polyvinylidenfluoride
for delivery rates of up to 12 m³/h

FLUX Centrifugal Immersion Pumps F 726 PP and F 726 PVDF
size 185 and 230 in polypropylene
or polyvinylidenfluoride
for delivery rates of up to 45 m³/h

Dimensions of three-phase motors
Questionnaire
Typical Applications
Transferring low flammability liquids up to a viscosity of 2500 mPas (cP) from containers or tanks, either open topped or closed. Suitable for stationary or portable applications.

Construction features
Centrifugal pump in stainless steel consisting of an inner tube and outer tube.

The centrifugal impeller in the pump housing is driven by the motor via the drive shaft. The drive shaft is supported by intermediate bearings within the inner tube, a mechanical seal separates the liquid from the bearings and upper shaft. This construction provides the ultimate in stability, and ensures the maximum integrity of the mechanical seal. With an open conical impeller.

Three-phase motors in differing kW-ratings are available as a matched power unit. Connection to the pump is made via a flexible coupling.

Construction features in detail

- Flexible coupling
- Drive shaft
- Inner tube
- Outer tube
- Mechanical seal
- Open conical impeller
Measured values ± 10% determined with water (20 °C). Nominal speed n = 2850 rpm

In determining the absorbed kW of the motor, multiply the absorbed kW shown in the above diagram with the specific gravity of the liquid to be pumped.
Technical data
Dimensions F 620 S-15 and F 620 S-30

Three-phase motor:
dimension X, Ø Y
and Z see page 22

Minimum liquid level
when starting the pump.
Also valid for variant 1.

Variant 1
with suction strainer
dimension e + 28 mm

Basic model
dimension e max. 3000 mm
Centrifugal Immersion Pump F 620 S

In stainless steel, thread on outlet G 1½ A, without drive motor

Drive motors for Centrifugal Immersion Pump F 620 S,
three-phase motors protected to IP 55, with motor protection switch or cable terminal box

Scope of supply
A complete vertical centrifugal immersion pump consists of: drive motor, pump and necessary accessories.
Weight per pump: 15 – 45 kg depending on the pump size, immersion length and motor kW.
FLUX Centrifugal Immersion Pump
F 640 PP in polypropylene
Size 15, 30, 15 Z and 30 Z

**Typical Applications**
Transferring low flammability liquids up to a viscosity of 2500 mPas (cP) from containers, tanks, either open topped or closed.
Transferring corrosive liquids in chemical processing and engineering, metal-working and electroplating together with water treatment and waste water treatment. Suitable for stationary or portable application.

**Construction features**
Vertical centrifugal immersion pump in polypropylene consisting of an inner tube and outer tube.

The centrifugal impeller in the pump housing is driven by the motor via the drive shaft. The drive shaft is supported by intermediate bearings within the plastic sleeved steel inner tube, a mechanical seal separating the liquid from the bearings and upper shaft. This construction provides the ultimate in stability, preventing elongation of the plastic at high temperatures and ensures the maximum integrity of the mechanical seal. With an open conical impeller or a closed centrifugal impeller (Z). The liquid is delivered between the inner and outer tubes to the pump outlet.

Three-phase motors in differing kW-ratings are available as a matched power unit. Connection to the pump is made via a flexible coupling.

**Construction features in detail**

- flexible coupling
- drive shaft
- steel cored inner tube
- outer tube
- mechanical seal
- open conical impeller
- closed centrifugal impeller (Z)
- F 640 PP-30 with suction strainer
Measured values ± 10% determined with water (20 °C). Nominal speed \( n = 2850 \text{ rpm} \)

In determining the absorbed kW of the motor, multiply the absorbed kW shown in the above diagram with the specific gravity of the liquid to be pumped.
Technical data

Three-phase motor:
dimension X, Ø Y
and Z see page 22

Minimum liquid level
when starting the pump.
Also valid for variant 1.

Variant 1
with suction strainer
dimension e + 38 mm

Basic model
dimension e max. 4100 mm
Centrifugal Immersion Pump F 640 PP in polypropylene, thread on outlet G 2¼ A, without drive motor

Drive motors for Centrifugal Immersion Pump F 640 PP, three-phase motors protected to IP 55, with motor protection switch or cable terminal box

Three-phase motors explosion-proof to II 2 G EEx e II T3 with cable terminal box.

Scope of supply
A complete vertical centrifugal immersion pump consists of: drive motor, pump and necessary accessories.
Weight per pump: 15 - 60 kg depending on the pump size, immersion length and motor kW.
**Typical applications**
Transferring low flammability liquids up to a viscosity of 2500 mPas (cP) from containers, tanks, either open topped or closed. Transferring corrosive liquids in chemical processing and engineering, metal-working and electroplating together with water treatment and waste water treatment. Suitable for stationary or portable application.

**Construction features**
Vertical centrifugal immersion pump for stationary application. The centrifugal impeller in the pump housing is driven by the motor via the drive shaft. The drive shaft is supported by intermediate bearings within the plastic sleeved steel inner tube, a mechanical seal separating the liquid from the bearings and upper shaft. This construction provides the ultimate in stability, preventing elongation of the plastic at high temperatures and ensures the maximum integrity of the mechanical seal.

This pump design does not have a separate discharge tube. Immediately after the pump housing the liquid is fed back into the outer tube and delivered to the outlet connection between the inner and outer tubes.

A range of carefully chosen impeller diameters, together with a range of three-phase motors in differing kW-ratings, ensures the optimum selection of pumps to meet the specific operating requirements. Connection of pump and motor is made via a flexible coupling.

**Construction features in detail**
Measured values ± 10% determined with water (20 °C). Nominal speed n = 2850 rpm

In order to achieve the desired output, centrifugal impellers in diameters of 100 to 160 mm are available.

In determining the absorbed kW of the motor, multiply the absorbed kW shown in the above diagram with the specific gravity of the liquid to be pumped.
Technical data

Dimensions F 640 PP-185 and F 640 PVDF-185

Three-phase motor:
dimension X, Ø Y
and Z see page 22

Minimum liquid level
when starting the pump.
Also valid for variant 1.

Variant 1
with suction strainer
dimension e + 90 mm

Basic model dimension e
max. 4100 mm

Dimensions F 640 PP-230 and F 640 PVDF-230

Three-phase motor:
dimension X, Ø Y
and Z see page 22

Minimum liquid level
when starting the pump.
Also valid for variant 1.

Variant 1
with suction strainer
dimension e + 90 mm

Basic model dimension e
max. 4100 mm
Centrifugal Immersion Pump F 640 PP and F 640 PVDF

Centrifugal Immersion Pump F 640 PP in polypropylene and F 640 PVDF in polyvinylidenfluoride, thread on outlet G 2¼ A, without drive motor

<table>
<thead>
<tr>
<th>Type/Size</th>
<th>F 640 PP-185</th>
<th>F 640 PVDF-185</th>
<th>F 640 PP-230</th>
<th>F 640 PVDF-230</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delivery rate Q max.</td>
<td>40 m³/h</td>
<td>40 m³/h</td>
<td>42 m³/h</td>
<td>42 m³/h</td>
</tr>
<tr>
<td>Delivery head H max.</td>
<td>23 m water column</td>
<td>23 m water column</td>
<td>32 m water column</td>
<td>32 m water column</td>
</tr>
<tr>
<td>Viscosity max.</td>
<td>150 mPas</td>
<td>150 mPas</td>
<td>150 mPas</td>
<td>150 mPas</td>
</tr>
<tr>
<td>Temperature max.</td>
<td>60 °C</td>
<td>80 °C</td>
<td>60 °C</td>
<td>80 °C</td>
</tr>
<tr>
<td>Seal type</td>
<td>mechanical seal in ceramic oxide /SiC, o-rings in FKM</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Material</td>
<td>shaft in Hastelloy C, seals in FKM</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Impeller</td>
<td>Ø 100 – 140 mm in PP or PVDF</td>
<td>Ø 130 – 160 mm in PP or PVDF</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pump housing</td>
<td>Ø 249 mm</td>
<td>Ø 264 mm</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Part No.

Immersion length Dimension e 1000 mm: 640 41 210 640 61 210 640 41 310 640 61 310
Immersion length Dimension e 1500 mm: 640 41 215 640 61 215 640 41 315 640 61 315
Immersion length Dimension e 2000 mm: 640 41 220 640 61 220 640 41 320 640 61 320

Part numbers for immersion length 400 to 4100 mm (in steps of 100 mm) on request. From dimension 2100 mm with welded pump housing part number 640 42 ... or rather 640 62 ...

Accessories

| Mounting flange in polypropylene to dimension 2000 mm: outside Ø 340 mm, pitch circle Ø 295 mm, 4 bores Ø 22 mm |
| Part No. | 947 14 049 |
| Mounting flange in polyvinylidenfluoride to dimension 2000 mm: outside Ø 445 mm, pitch circle Ø 400 mm, 4 bores Ø 22 mm |
| Part No. | 947 14 085 |

Suction stainer in PP or PVDF welded onto the cover of the pump housing

| Hose connection in polypropylene, complete with nut G 2¼ for hose inside diameter DN 32 |
| Part No. | 959 04 098 |
| Hose connection in polypropylene, complete with nut G 2¼ for hose inside diameter DN 50 |
| Part No. | 959 04 100 |

Drive motors for Centrifugal Immersion Pump F 640 PP and F 640 PVDF, three-phase motors protected to IP 55, with motor protection switch or cable terminal box

<table>
<thead>
<tr>
<th>Capacity</th>
<th>Voltage</th>
<th>Frequency</th>
<th>Nominal speed</th>
<th>Part No.</th>
<th>Part No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>P2</td>
<td></td>
<td></td>
<td></td>
<td>Version with motor</td>
<td>Version with cable terminal box</td>
</tr>
<tr>
<td>0,75 kW</td>
<td>230/400 V</td>
<td>50 Hz</td>
<td>2850 rpm</td>
<td>001 00 056</td>
<td>001 00 035</td>
</tr>
<tr>
<td>1,1 kW</td>
<td>230/400 V</td>
<td>50 Hz</td>
<td>2850 rpm</td>
<td>001 00 057</td>
<td>001 00 036</td>
</tr>
<tr>
<td>1,5 kW</td>
<td>230/400 V</td>
<td>50 Hz</td>
<td>2850 rpm</td>
<td>001 00 058</td>
<td>001 00 037</td>
</tr>
<tr>
<td>2,2 kW</td>
<td>230/400 V</td>
<td>50 Hz</td>
<td>2850 rpm</td>
<td>001 00 059</td>
<td>001 00 038</td>
</tr>
<tr>
<td>3,0 kW</td>
<td>400 V</td>
<td>50 Hz</td>
<td>2850 rpm</td>
<td>001 00 060</td>
<td>001 00 039</td>
</tr>
<tr>
<td>4,0 kW</td>
<td>400 V</td>
<td>50 Hz</td>
<td>2850 rpm</td>
<td>001 00 061</td>
<td>001 00 040</td>
</tr>
</tbody>
</table>

Three-phase motors explosion-proof to II 2 G Ex e de II C T6 with cable terminal box.

<table>
<thead>
<tr>
<th>Capacity</th>
<th>Voltage</th>
<th>Frequency</th>
<th>Nominal speed</th>
<th>Part No.</th>
<th>Part No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>P2</td>
<td></td>
<td></td>
<td></td>
<td>Version with cable terminal box Motor protection switch II 2 G Ex e de II C T6 to be mounted on the carrying handle</td>
<td></td>
</tr>
<tr>
<td>0,75 kW</td>
<td>230/400 V</td>
<td>50 Hz</td>
<td>2850 rpm</td>
<td>001 00 066</td>
<td>936 06 118</td>
</tr>
<tr>
<td>1,1 kW</td>
<td>230/400 V</td>
<td>50 Hz</td>
<td>2850 rpm</td>
<td>001 00 067</td>
<td>936 06 118</td>
</tr>
<tr>
<td>1,5 kW</td>
<td>230/400 V</td>
<td>50 Hz</td>
<td>2850 rpm</td>
<td>001 00 068</td>
<td>936 06 119</td>
</tr>
<tr>
<td>2,0 kW</td>
<td>230/400 V</td>
<td>50 Hz</td>
<td>2850 rpm</td>
<td>001 00 069</td>
<td>936 06 119</td>
</tr>
<tr>
<td>2,5 kW</td>
<td>400 V</td>
<td>50 Hz</td>
<td>2850 rpm</td>
<td>001 00 070</td>
<td>936 06 120</td>
</tr>
<tr>
<td>3,3 kW</td>
<td>400 V</td>
<td>50 Hz</td>
<td>2850 rpm</td>
<td>001 00 071</td>
<td>936 06 120</td>
</tr>
</tbody>
</table>

Scope of supply

A complete vertical centrifugal immersion pump consists of: drive motor, pump with mounting flange and necessary accessories. Weight per pump: 20 – 70 kg depending on the pump size, immersion length and motor kW.
FLUX Centrifugal Immersion Pump
F 620 S TR and F 640 PP TR
for dry installation for horizontal use

**Typical applications**
Transferring low flammability liquids up to a viscosity of 2500 mPas (cP) from containers or tanks, either open topped or closed. The pump is used either horizontally mounted onto a base plate or fixed vertically.

**Construction features**
Centrifugal pump in horizontal version in stainless steel or polypropylene, consisting of an inner tube and outer tube.

The centrifugal impeller in the pump housing is driven by the motor via the drive shaft. The drive shaft is supported by intermediate bearings within inner tube, a mechanical seal separates the liquid from the bearings and upper shaft. The PP version has a steel cored PP inner tube. This construction provides the ultimate in stability, preventing elongation of the plastic at high temperatures and ensures the maximum integrity of the mechanical seal.

With an open conical impeller or a closed centrifugal impeller (Z)

Depending on the model, suction and discharge sides are fitted with threaded or flanged connections.

Three-phase motors in differing kW-ratings are available as a matched power unit. Connection to the pump is made via a flexible coupling.
Measured values ± 10% determined with water (20 °C). Nominal speed n = 2850 rpm

In determining the absorbed kW of the motor, multiply the absorbed kW shown in the above diagram with the specific gravity of the liquid to be pumped.
Technical data

Dimensions F 620 S-30 TR

Three-phase motor: dimension X, Ø Y and Z see page 22

Dimensions F 640 PP-30 TR with thread connection

Three-phase motor: dimension X, Ø Y and Z see page 22

Dimensions F 640 PP-30 TR with flange connection

Three-phase motor: dimension X, Ø Y and Z see page 22

Dimensions F 640 PP-230 TR

Three-phase motor: dimension X, Ø Y and Z see page 22
Centrifugal Immersion Pump
for dry installation

Centrifugal Immersion Pump F 620 S TR in stainless steel,
without drive motor

<table>
<thead>
<tr>
<th>Type/Size</th>
<th>F 620 S-30 TR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delivery rate Q max.</td>
<td>23 m³/h</td>
</tr>
<tr>
<td>Delivery head H max.</td>
<td>12 m water column</td>
</tr>
<tr>
<td>Viscosity max.</td>
<td>2500 mPas</td>
</tr>
<tr>
<td>Temperature max.</td>
<td>100 °C</td>
</tr>
<tr>
<td>Seal type</td>
<td>mechanical seal in ceramic oxide, o-rings in FKM</td>
</tr>
<tr>
<td>Material</td>
<td>shaft in stainless steel 316 Ti, seals in FKM</td>
</tr>
<tr>
<td>Impeller</td>
<td>open conical impeller in polypropylene (version in stainless steel on request)</td>
</tr>
<tr>
<td>Suction side</td>
<td>thread G 2 A</td>
</tr>
<tr>
<td>Discharge side</td>
<td>thread G 1½ A</td>
</tr>
<tr>
<td>Part No.</td>
<td>620 25 502</td>
</tr>
</tbody>
</table>

Accessories
Base plate in polypropylene
Part No. 001 15 024

Hose connection in stainless steel, complete with nut G 1½
- for hose inside diameter DN 25: 959 04 001
- for hose inside diameter DN 32: 959 04 003
- for hose inside diameter DN 38: 959 04 004

Centrifugal Immersion Pump F 640 PP-230 TR in polypropylene,
without drive motor

<table>
<thead>
<tr>
<th>Type/Size</th>
<th>F 640 PP-230 TR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delivery rate Q max.</td>
<td>44 m³/h</td>
</tr>
<tr>
<td>Delivery head H max.</td>
<td>33 m water column</td>
</tr>
<tr>
<td>Viscosity max.</td>
<td>150 mPas</td>
</tr>
<tr>
<td>Temperature max.</td>
<td>60 °C</td>
</tr>
<tr>
<td>Seal type</td>
<td>mechanical seal in ceramic oxide/SiC, o-rings in FKM</td>
</tr>
<tr>
<td>Material</td>
<td>shaft in Hastelloy C, seals in FKM</td>
</tr>
<tr>
<td>Impeller</td>
<td>open conical impeller in PP</td>
</tr>
<tr>
<td>Suction side</td>
<td>thread G 2 A</td>
</tr>
<tr>
<td>Discharge side</td>
<td>thread G 2½ A</td>
</tr>
<tr>
<td>Part No.</td>
<td>640 41 600</td>
</tr>
</tbody>
</table>

Part No. 640 41 300

Accessories
Base plate in polypropylene for F 640 PP-30 TR and F 640 PP-230 TR
Part No. 001 15 023

Hose connection in polypropylene, complete with nut G 2¼
- for hose inside diameter DN 32: 959 04 098
- for hose inside diameter DN 38: 959 04 099
- for hose inside diameter DN 50: 959 04 100

Drive motors see page 9.

Scope of supply
A complete centrifugal immersion pump for dry installation consists of drive motor, pump and base plate.
Weight per pump including base plate: 9-50 kg depending on pump size and motor kW.
FLUX Centrifugal Immersion Pumps
F 706 PP in polypropylene
Size 135, 185, 230 and 350

**Typical applications**
Transfer of corrosive liquids in the chemical industry and all aspects of chemical engineering together with any application that requires the safe and economical transfer, or circulation, of acids and alkalis or other chemical fluids, with or without solids in suspension.

**Construction features**
Vertical centrifugal immersion pump for stationary application. The robust pump housing is solidly welded to the support tube. A sleeve bearing, which is lubricated by the liquid, allows immersion lengths of up to 1000 mm, and on the pump size 230, with additional intermediate bearings, even up to 2000 mm.

A large polypropylene-coated drive shaft together with the use of a thick-walled support tube ensures a very smooth running pump. This type of construction prevents the rotating components from coming to contact with the pump housing and guarantees a long service life and extended maintenance intervals, even in the case of continuous use.

A range of carefully chosen impeller diameters, together with a range of three-phase motors in differing kW-ratings, ensures the optimum selection of pumps to meet the specific operating requirements. Connection of pump and motor is made via a flexible coupling.

**Construction features in detail**

- Flexible coupling
- Large pump shaft with protective coating in PP
- Slide bearing lubricated by the liquid
- Wearing bushing in HC
- Centrifugal impeller in differing diameters
- Cover with circlip on pump size 185 and 350
Measured values ± 10 % determined with water (20 °C). Nominal speed n = 2850 rpm

In order to obtain the desired output, centrifugal impellers in differing diameters are available.

In determining the absorbed kW of the motor, multiply the absorbed kW shown in the above diagram with the specific gravity of the liquid to be pumped.

Nominal speed n = 1450 rpm
Technical data
Dimensions F 706 PP-135

Basic model
dimension e
max. 1000 mm

Dimension p
max. 1500 mm

Three-phase motors:
dimension X, Ø Y
and Z see page 22

Variants:
Variant 1
with extension tube
Variant 2
with suction strainer
Variant 3
with extension tube
and suction strainer
Centrifugal Immersion Pumps F 706 PP

Centrifugal Immersion Pump F 706 PP in polypropylene, with support tube, without drive motor

- **Delivery rate Q max.**
  - F 706 PP-135: 12 m³/h
  - F 706 PP-185: 43 m³/h
  - F 706 PP-230: 44 m³/h
  - F 706 PP-350: 74 m³/h

- **Delivery head H max.**
  - F 706 PP-135: 15 m water column
  - F 706 PP-185: 23 m water column
  - F 706 PP-230: 33 m water column
  - F 706 PP-350: 23 m water column

- **Viscosity max.**
  - F 706 PP-135: 150 mPas
  - F 706 PP-185: 150 mPas
  - F 706 PP-230: 150 mPas
  - F 706 PP-350: 150 mPas

- **Temperature max.**
  - 60 °C

- **Seal material**
  - no seals in contact with the liquid

- **Material**
  - shaft in stainless steel 316 Ti with protective coating in PP, slide bearing in hard carbon or fluorosint
  - Centrifugal Impeller in PP
    - Ø 80 – 100 mm
    - Ø 100 – 140 mm
    - Ø 130 – 160 mm
    - Ø 200 – 250 mm
  - Pump housing
    - Ø 174 mm
    - Ø 249 mm
    - Ø 264 mm
    - Ø 417 mm
  - Mounting flange in PP
    - outside Ø 250 mm
    - outside Ø 340 mm
    - outside Ø 340 mm
    - outside Ø 500 mm
  - Thread on outlet
    - G 1½ A
    - G 2½ A
    - G 2½ A
    - G 2½ A
  - Motor capacity
    - 0.37 – 0.75 kW
    - 1.5 – 4.0 kW
    - 3.0 – 5.5 kW
    - 3.0 – 5.5 kW
    - n = 2850 rpm
    - n = 2850 rpm
    - n = 2850 rpm
    - n = 1450 rpm

- **Part No.**
  - Immersion length Dimension e 500 mm
    - F 706 PP-135: 706 41 105
    - F 706 PP-185: 706 41 107
    - F 706 PP-230: 706 41 305
    - F 706 PP-350: 706 41 307
  - Immersion length Dimension e 700 mm
    - F 706 PP-135: 706 41 205
    - F 706 PP-185: 706 41 207
    - F 706 PP-230: 706 41 307
    - F 706 PP-350: 706 41 405
  - Immersion length Dimension e 1000 mm
    - F 706 PP-135: 706 41 210
    - F 706 PP-185: 706 41 210
    - F 706 PP-230: 706 41 310
    - F 706 PP-350: 706 41 410

- **Scope of supply**
  - A complete vertical centrifugal immersion pump consists of: drive motor, pump with mounting flange and necessary accessories.
  - Weight per pump F 706 PP: 13 – 85 kg depending on the pump size, immersion length and motor kW.

---

**Drive motors for Centrifugal Immersion Pump F 706 PP,**
three-phase motors protected to IP 55, with cable terminable box

<table>
<thead>
<tr>
<th>Capacity P2</th>
<th>Flange Ø</th>
<th>Voltage</th>
<th>Frequency</th>
<th>Nominal speed</th>
<th>Part No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.37 kW</td>
<td>120 mm</td>
<td>230/400 V</td>
<td>50 Hz</td>
<td>n = 2850 rpm</td>
<td>001 00 004</td>
</tr>
<tr>
<td>0.55 kW</td>
<td>120 mm</td>
<td>230/400 V</td>
<td>50 Hz</td>
<td>n = 2850 rpm</td>
<td>001 00 005</td>
</tr>
<tr>
<td>0.75 kW</td>
<td>120 mm</td>
<td>230/400 V</td>
<td>50 Hz</td>
<td>n = 2850 rpm</td>
<td>001 00 034</td>
</tr>
<tr>
<td>1.5 kW</td>
<td>160 mm</td>
<td>230/400 V</td>
<td>50 Hz</td>
<td>n = 2850 rpm</td>
<td>001 00 037</td>
</tr>
<tr>
<td>2.2 kW</td>
<td>160 mm</td>
<td>230/400 V</td>
<td>50 Hz</td>
<td>n = 2850 rpm</td>
<td>001 00 038</td>
</tr>
<tr>
<td>3.0 kW</td>
<td>160 mm</td>
<td>400 V</td>
<td>50 Hz</td>
<td>n = 2850 rpm</td>
<td>001 00 039</td>
</tr>
<tr>
<td>4.0 kW</td>
<td>160 mm</td>
<td>400 V</td>
<td>50 Hz</td>
<td>n = 2850 rpm</td>
<td>001 00 040</td>
</tr>
<tr>
<td>5.5 kW</td>
<td>160 mm</td>
<td>400 V</td>
<td>50 Hz</td>
<td>n = 2850 rpm</td>
<td>001 00 041</td>
</tr>
<tr>
<td>3.0 kW</td>
<td>160 mm</td>
<td>400 V</td>
<td>50 Hz</td>
<td>n = 1450 rpm</td>
<td>001 00 530</td>
</tr>
<tr>
<td>4.0 kW</td>
<td>160 mm</td>
<td>400 V</td>
<td>50 Hz</td>
<td>n = 1450 rpm</td>
<td>001 00 511</td>
</tr>
<tr>
<td>5.5 kW</td>
<td>160 mm</td>
<td>400 V</td>
<td>50 Hz</td>
<td>n = 1450 rpm</td>
<td>001 00 532</td>
</tr>
</tbody>
</table>

Three-phase motors explosion-proof to II 2 G EEx e II T3 with terminal box on request.
Typical applications
Transferring and circulating of neutral or corrosive liquids in the chemical industry and chemical engineering, electroplating industry, steel or stainless steel pickling plants, flue gas decontamination, exhaust air purification, water and waste water treatment.

Construction features
Vertical centrifugal immersion pump for stationary application. With a compact design requiring very little head room above the mounting flange. This design uses a three-phase motor with extended shaft, especially allowing the pump to use the motor shaft. All wetted parts are made in PP or PVDF. The robust support tube (bars) solidly connected to the mounting flange ensures a very smooth running, prevents the rotating elements from making contact with the pump housing and guarantees a very long service life, even in case of continuous use. As neither bearings nor seals are in contact with the liquid, the pump is very wear-resistant and suitable for dry running operation. The immersion length of the pump can be extended, up to 1000 mm maximum, by the suction tube option. A suction strainer welded onto the cover of the pump housing or onto the extension tube protects the pump against the ingress of coarse impurities.

A range of carefully chosen impeller diameters, together with a range of three-phase motors in differing kW-ratings, ensures the optimum selection of pumps to meet the specific operating requirements.

Construction features in detail
Measured values ± 10% determined with water (20 °C). Nominal speed n = 2850 rpm

In order to obtain the desired output, centrifugal impellers in differing diameters are available.

In determining the absorbed kW of the motor, multiply the absorbed kW shown in the above diagram with the specific gravity of the liquid to be pumped.

Performance chart F 716 PP1-135, F 716 PP2-135 and F 716 PVDF2-135
Technical data
Dimensions F 716 PP1-115
Version with support tube

Three-phase motors:
dimension X, Ø Y and Z see page 22

Basic model
dimension e
max. 400 mm

Dimension p max. 1000 mm

Dimensions F 716 PP2-115 and F 716 PVDF2-115
Version with support bars

Variant 1
with extension tube

Variant 2
with suction strainer

Variant 3
with extension tube and suction strainer

Basic model
dimension e
max. 500 mm

Dimension p max. 1000 mm

Dimensions F 716 PP1-135
Version with support tube

Three-phase motors:
dimension X, Ø Y and Z see page 22

Basic model
dimension e
max. 400 mm

Dimension p max. 1000 mm

Dimensions F 716 PP2-135 and F 716 PVDF2-135
Version with support bars

Minimum or maximum liquid level when starting the pump.
Also valid for the variants 1, 2 and 3.

Basic model
dimension e
max. 500 mm

Dimension p max. 1000 mm
Centrifugal Immersion Pump F 716 PP in polypropylene, with integral three-phase motor

<table>
<thead>
<tr>
<th>Type/Size</th>
<th>F 716 PP1-115 with support tube</th>
<th>F 716 PP2-115 with support bars</th>
<th>F 716 PP1-135 with support tube</th>
<th>F 716 PP2-135 with support bars</th>
</tr>
</thead>
<tbody>
<tr>
<td>Version</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delivery rate Q max.</td>
<td>8 m³/h</td>
<td>8 m³/h</td>
<td>12 m³/h</td>
<td>12 m³/h</td>
</tr>
<tr>
<td>Delivery head H max.</td>
<td>8 m water column</td>
<td>8 m water column</td>
<td>15 m water column</td>
<td>15 m water column</td>
</tr>
<tr>
<td>Viscosity max.</td>
<td>150 mPas</td>
<td>150 mPas</td>
<td>150 mPas</td>
<td>150 mPas</td>
</tr>
<tr>
<td>Temperature max.</td>
<td>60 °C</td>
<td>80 °C</td>
<td>60 °C</td>
<td>80 °C</td>
</tr>
<tr>
<td>Seal material</td>
<td>no bearings nor seals in contact with the liquid</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Material</td>
<td>shaft in stainless steel 316 Ti with protective coating in PP</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Centrifugal impeller in PP</td>
<td>Ø 50 – 80 mm</td>
<td>Ø 50 – 80 mm</td>
<td>Ø 80 – 100 mm</td>
<td>Ø 80 – 100 mm</td>
</tr>
<tr>
<td>Pump housing</td>
<td>Ø 150 mm</td>
<td>Ø 150 mm</td>
<td>Ø 174 mm</td>
<td>Ø 174 mm</td>
</tr>
<tr>
<td>Mounting flange in PP</td>
<td>Außen-Ø 250 mm</td>
<td>Außen-Ø 250 mm</td>
<td>Außen-Ø 250 mm</td>
<td>Außen-Ø 250 mm</td>
</tr>
<tr>
<td>Thread on outlet</td>
<td>G 1¼ A</td>
<td>G 1¼ A</td>
<td>G 1½ A</td>
<td>G 1½ A</td>
</tr>
</tbody>
</table>

Centrifugal Immersion Pump F 716 PVDF in polyvinylidenfluoride, with integral three-phase motor

<table>
<thead>
<tr>
<th>Type/Size</th>
<th>F 716 PVDF-115 with support bars</th>
<th>F 716 PVDF-135 with support bars</th>
</tr>
</thead>
<tbody>
<tr>
<td>Version</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delivery rate Q max.</td>
<td>8 m³/h</td>
<td>12 m³/h</td>
</tr>
<tr>
<td>Delivery head H max.</td>
<td>8 m water column</td>
<td>15 m water column</td>
</tr>
<tr>
<td>Viscosity max.</td>
<td>150 mPas</td>
<td>150 mPas</td>
</tr>
<tr>
<td>Temperature max.</td>
<td>100 °C</td>
<td>100 °C</td>
</tr>
<tr>
<td>Seal material</td>
<td>no bearings nor seals in contact with the liquid</td>
<td></td>
</tr>
<tr>
<td>Material</td>
<td>shaft in stainless steel 316 Ti with protective coating in PVDF</td>
<td></td>
</tr>
<tr>
<td>Centrifugal impeller in PVDF</td>
<td>Ø 50 – 80 mm</td>
<td>Ø 80 – 100 mm</td>
</tr>
<tr>
<td>Pump housing</td>
<td>Ø 150 mm</td>
<td>Ø 174 mm</td>
</tr>
<tr>
<td>Mounting flange in PVDF</td>
<td>outside Ø 245 mm</td>
<td>outside Ø 245 mm</td>
</tr>
<tr>
<td>Thread on outlet</td>
<td>G 1¼ A</td>
<td>G 1¼ A</td>
</tr>
<tr>
<td>Motor capacity P2</td>
<td>0,37 kW</td>
<td>0,55 kW</td>
</tr>
<tr>
<td>Immersion length Dimension e 300 mm</td>
<td>716 41 003</td>
<td>716 41 013</td>
</tr>
<tr>
<td>Immersion length Dimension e 400 mm</td>
<td>716 41 004</td>
<td>716 41 014</td>
</tr>
<tr>
<td>Immersion length Dimension e 500 mm</td>
<td>716 42 005</td>
<td>716 42 015</td>
</tr>
<tr>
<td>Part No.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Motor capacity P2</td>
<td>0,55 kW</td>
<td>0,75 kW</td>
</tr>
<tr>
<td>Immersion length Dimension e 300 mm</td>
<td>716 62 003</td>
<td>716 62 013</td>
</tr>
<tr>
<td>Immersion length Dimension e 400 mm</td>
<td>716 62 004</td>
<td>716 62 014</td>
</tr>
<tr>
<td>Immersion length Dimension e 500 mm</td>
<td>716 62 005</td>
<td>716 62 015</td>
</tr>
<tr>
<td>Part No.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Scope of supply
A complete vertical centrifugal immersion pump consists of: pump with mounting flange and integral three-phase motor and necessary accessories. Weight per pump: 9 – 15 kg depending on the pump size, immersion length and motor kW.
FLUX Centrifugal Immersion Pump
F 716 PP and F 716 PVDF
In polypropylene or polyvinylidenfluoride size 185 and 230

**Typical applications**
Transferring and circulating of neutral or corrosive liquids in the chemical industry and chemical engineering, electroplating industry, steel or stainless steel pickling plants, flue gas decontamination, exhaust air purification, water and waste water treatment.

**Construction features**
Vertical centrifugal immersion pump for stationary application. With a compact design requiring very little head room above the mounting flange. This design uses a three-phase motor with extended shaft, allowing the pump to use the motor shaft. All wetted parts are made in PP or PVDF.

The robust support tube (bars) solidly connected to the mounting flange ensures a very smooth running, prevents the rotating elements from making contact with the pump housing and guarantees a very long service life, even in case of continuous use. As neither bearings nor seals are in contact with the liquid, the pump is very wear-resistant and suitable for dry running operation. The immersion length of the pump can be extended, up to 1500 mm maximum, by the suction tube option. A suction strainer welded onto the cover of the pump housing or onto the extension tube protects the pump against the ingress of coarse impurities.

A range of carefully chosen impeller diameters, together with a range of three-phase motors in differing kW-ratings, ensures the optimum selection of pumps to meet the specific operating requirements.

**Construction features in detail**
- Integral three-phase motor
- Seal kit prevents vapours entering the motor area
- Motor shaft = pump shaft with protective coating in PP or PVDF
- Version with support tube for temperatures up to 60 °C
- Version with support bar for temperatures up to 80 °C (PP) or 100 °C (PVDF)
- Centrifugal impeller in differing diameters
- Cover with circlip on pump size 185
Technical data
Performance chart F 716 PP1-185, F 716 PP2-185 and F 716 PVDF2-185

Measured values ± 10% determined with water (20 °C). Nominal speed n = 2850 rpm

In order to obtain the desired output, centrifugal impellers in differing diameters are available.

In determining the absorbed kW of the motor, multiply the absorbed kW shown in the above diagram with the specific gravity of the liquid to be pumped.

Performance chart F 716 PP1-230, F 716 PP2-230 and F 716 PVDF2-230
Technical data

Dimensions F 716 PP1-185
Version with support tube

Basic model dimension e max. 500 mm

Dimension p max. 1500 mm

Three-phase motors: dimension X, Ø Y and Z see page 22

Variant 1 with extension tube

Variant 2 with suction strainer

Variant 3 with extension tube and suction strainer

Dimensions F 716 PP2-185 and F 716 PVDF2-185
Version with support bars

Basic model dimension e max. 500 mm

Dimension p max. 1500 mm

Minimum or maximum liquid level when starting the pump. Also valid for the variants 1, 2 and 3.

Dimensions F 716 PP1-230
Version with support tube

Basic model dimension e max. 500 mm

Dimension p max. 1500 mm

Three-phase motors: dimension X, Ø Y and Z see page 22

Dimensions F 716 PP2-230 and F 716 PVDF2-230
Version with support bars

Basic model dimension e max. 500 mm

Dimension p max. 1500 mm
## Centrifugal Immersion Pump F 716 PP in polypropylene, with integral three-phase motor

<table>
<thead>
<tr>
<th>Type/Size</th>
<th>F 716 PP-185</th>
<th>F 716 PP-2185</th>
<th>F 716 PP-230</th>
<th>F 716 PP-230</th>
</tr>
</thead>
<tbody>
<tr>
<td>Version</td>
<td>with support tube</td>
<td>with support bars</td>
<td>with support tube</td>
<td>with support bars</td>
</tr>
<tr>
<td>Delivery rate Q max.</td>
<td>38 m³/h</td>
<td>38 m³/h</td>
<td>45 m³/h</td>
<td>45 m³/h</td>
</tr>
<tr>
<td>Delivery head H max.</td>
<td>23 m water column</td>
<td>23 m water column</td>
<td>35 m water column</td>
<td>35 m water column</td>
</tr>
<tr>
<td>Viscosity max.</td>
<td>150 mPas</td>
<td>150 mPas</td>
<td>150 mPas</td>
<td>150 mPas</td>
</tr>
<tr>
<td>Temperature max.</td>
<td>60 °C</td>
<td>80 °C</td>
<td>80 °C</td>
<td>80 °C</td>
</tr>
<tr>
<td>Seal material</td>
<td>no bearings nor seals in contact with the liquid</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Material</td>
<td>shaft in stainless steel 316 Ti with protective coating in PP</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Centrifugal impeller in PP</td>
<td>Ø 100 – 140 mm</td>
<td>Ø 100 – 140 mm</td>
<td>Ø 130 – 160 mm</td>
<td>Ø 130 – 160 mm</td>
</tr>
<tr>
<td>Pump housing</td>
<td>Ø 249 mm</td>
<td>Ø 249 mm</td>
<td>Ø 264 mm</td>
<td>Ø 264 mm</td>
</tr>
<tr>
<td>Mounting flange in PP</td>
<td>outside Ø 340 mm</td>
<td>outside Ø 340 mm</td>
<td>outside Ø 340 mm</td>
<td>outside Ø 340 mm</td>
</tr>
<tr>
<td>Thread on outlet</td>
<td>G 2¼ A</td>
<td>G 2¼ A</td>
<td>G 2¼ A</td>
<td>G 2¼ A</td>
</tr>
<tr>
<td>Part No.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Motor capacity P2</td>
<td>1,5 kW</td>
<td>1,5 kW</td>
<td>3,0 kW</td>
<td>3,0 kW</td>
</tr>
<tr>
<td>Immersion length Dimension e 300 mm</td>
<td>716 41 203</td>
<td>716 42 203</td>
<td>716 41 303</td>
<td>716 42 303</td>
</tr>
<tr>
<td>Immersion length Dimension e 400 mm</td>
<td>716 41 204</td>
<td>716 42 204</td>
<td>716 41 304</td>
<td>716 42 304</td>
</tr>
<tr>
<td>Immersion length Dimension e 500 mm</td>
<td>716 41 205</td>
<td>716 42 205</td>
<td>716 41 305</td>
<td>716 42 305</td>
</tr>
<tr>
<td>Motor capacity P2</td>
<td>2,2 kW</td>
<td>2,2 kW</td>
<td>4,0 kW</td>
<td>4,0 kW</td>
</tr>
<tr>
<td>Immersion length Dimension e 300 mm</td>
<td>716 41 213</td>
<td>716 42 213</td>
<td>716 41 313</td>
<td>716 42 313</td>
</tr>
<tr>
<td>Immersion length Dimension e 400 mm</td>
<td>716 41 214</td>
<td>716 42 214</td>
<td>716 41 314</td>
<td>716 42 314</td>
</tr>
<tr>
<td>Immersion length Dimension e 500 mm</td>
<td>716 41 215</td>
<td>716 42 215</td>
<td>716 41 315</td>
<td>716 42 315</td>
</tr>
<tr>
<td>Motor capacity P2</td>
<td>3,0 kW</td>
<td>3,0 kW</td>
<td>5,5 kW</td>
<td>5,5 kW</td>
</tr>
<tr>
<td>Immersion length Dimension e 300 mm</td>
<td>716 41 223</td>
<td>716 42 223</td>
<td>716 41 323</td>
<td>716 42 323</td>
</tr>
<tr>
<td>Immersion length Dimension e 400 mm</td>
<td>716 41 224</td>
<td>716 42 224</td>
<td>716 41 324</td>
<td>716 42 324</td>
</tr>
<tr>
<td>Immersion length Dimension e 500 mm</td>
<td>716 41 225</td>
<td>716 42 225</td>
<td>716 41 325</td>
<td>716 42 325</td>
</tr>
<tr>
<td>Motor capacity P2</td>
<td>4,0 kW</td>
<td>4,0 kW</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Immersion length Dimension e 300 mm</td>
<td>716 41 233</td>
<td>716 42 233</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Immersion length Dimension e 400 mm</td>
<td>716 41 234</td>
<td>716 42 234</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Immersion length Dimension e 500 mm</td>
<td>716 41 235</td>
<td>716 42 235</td>
<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>

## Centrifugal Immersion Pump F 716 PVDF in polyvinylidenfluoride, with integral three-phase motor

<table>
<thead>
<tr>
<th>Type/Size</th>
<th>F 716 PVDF2-185</th>
<th>F 716 PVDF2-230</th>
</tr>
</thead>
<tbody>
<tr>
<td>Version</td>
<td>with support bars</td>
<td>with support bars</td>
</tr>
<tr>
<td>Delivery rate Q max.</td>
<td>38 m³/h</td>
<td>45 m³/h</td>
</tr>
<tr>
<td>Delivery head H max.</td>
<td>23 m water column</td>
<td>35 m water column</td>
</tr>
<tr>
<td>Viscosity max.</td>
<td>150 mPas</td>
<td>150 mPas</td>
</tr>
<tr>
<td>Temperature max.</td>
<td>100 °C</td>
<td>100 °C</td>
</tr>
<tr>
<td>Seal material</td>
<td>no bearings nor seals in contact with the liquid</td>
<td></td>
</tr>
<tr>
<td>Material</td>
<td>shaft in stainless steel 316 Ti with protective coating in PVDF</td>
<td></td>
</tr>
<tr>
<td>Centrifugal impeller in PVDF</td>
<td>Ø 100 – 140 mm</td>
<td>Ø 130 – 160 mm</td>
</tr>
<tr>
<td>Pump housing</td>
<td>Ø 249 mm</td>
<td>Ø 264 mm</td>
</tr>
<tr>
<td>Mounting flange in RCH1000</td>
<td>outside Ø 340 mm</td>
<td>outside Ø 340 mm</td>
</tr>
<tr>
<td>Thread on outlet</td>
<td>G 2¼ A</td>
<td>G 2¼ A</td>
</tr>
<tr>
<td>Part No.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Motor capacity P2</td>
<td>1,5 kW</td>
<td>2,2 kW</td>
</tr>
<tr>
<td>Immersion length Dimension e 300 mm</td>
<td>716 41 203</td>
<td>716 42 213</td>
</tr>
<tr>
<td>Immersion length Dimension e 400 mm</td>
<td>716 41 204</td>
<td>716 42 214</td>
</tr>
<tr>
<td>Immersion length Dimension e 500 mm</td>
<td>716 41 205</td>
<td>716 42 215</td>
</tr>
<tr>
<td>Motor capacity P2</td>
<td>3,0 kW</td>
<td>4,0 kW</td>
</tr>
<tr>
<td>Immersion length Dimension e 300 mm</td>
<td>716 41 223</td>
<td>716 42 223</td>
</tr>
<tr>
<td>Immersion length Dimension e 400 mm</td>
<td>716 41 224</td>
<td>716 42 224</td>
</tr>
<tr>
<td>Immersion length Dimension e 500 mm</td>
<td>716 41 225</td>
<td>716 42 225</td>
</tr>
<tr>
<td>Motor capacity P2</td>
<td>4,0 kW</td>
<td>4,0 kW</td>
</tr>
<tr>
<td>Immersion length Dimension e 300 mm</td>
<td>716 41 233</td>
<td>716 42 233</td>
</tr>
<tr>
<td>Immersion length Dimension e 400 mm</td>
<td>716 41 234</td>
<td>716 42 234</td>
</tr>
<tr>
<td>Immersion length Dimension e 500 mm</td>
<td>716 41 235</td>
<td>716 42 235</td>
</tr>
</tbody>
</table>

## Accessories
- Extension tube in PP or PVDF in steps of 100 mm, Dimension p up to max. 1500 mm.
- Suction strainer in PP or PVDF welded onto the cover of the pump housing or onto the extension tube.

Weight per pump: 22 – 50 kg depending on the pump size, immersion length and motor kW.
FLUX Centrifugal Immersion Pump
F 726 PP and F 726 PVDF
In polypropylene or polyvinylidenfluoride size 115 and 135

**Typical applications**
Transferring and circulating of neutral or corrosive liquids in the whole field of the chemical industry and chemical engineering, electroplating industry, steel or stainless steel pickling plants, flue gas decontamination, exhaust air purification, water and waste-water treatment.

**Construction features**
Vertical centrifugal immersion pump for stationary application. The robust pump shaft is mounted in an upper pedestal and supported by two antifriction bearings. This construction, with the bearings spaced along the pedestal, ensures that any radial or axial forces are absorbed, even under heavy load. The result is a very smooth running pump. The solid version with support bars prevents the rotating elements from making contact with the pump housing and guarantees a very long service life, even in continuous use applications. As neither bearing nor seals are in contact with the liquid, the pump is very wear-resistant and suitable for dry running operation. The immersion length of the pump can be extended, up to 1000 mm maximum, by the suction tube option. A suction strainer welded onto the cover of the pump housing or onto the extension tube protects the pump against the ingress of coarse impurities.

A range of carefully chosen impeller diameters, together with a range of three-phase motors in differing kW-ratings, ensures the optimum selection of pumps to meet the specific operating requirements.

**Construction features in detail**
- 2 antifriction bearings located in a pedestal
- Seal kit prevents vapours entering the pedestal
- Robust pump shaft with protective coating in PP or PVDF
- Version with support bars for temperatures up to 80 °C (PP) or 100 °C (PVDF)
- Centrifugal impeller in differing diameters
Measured values ± 10% determined with water (20 °C). Nominal speed n = 2850 rpm

In order to achieve the desired output, centrifugal impellers in differing diameters are available.

In determining the absorbed kW of the motor, multiply the absorbed kW shown in the above diagram with the specific gravity of the liquid to be pumped.

Performance chart F 726 PP2-135 and F 726 PVDF2-135
Technical data
Dimensions F 726 PP2-115 and F 726 PVDF2-115

Three-phase motors:
dimension X, Ø Y
and Z see page 22

Basic model
dimension e max. 500 mm

Variant 1
with extension tube
dimension p max. 1000 mm

Variant 2
with suction strainer

Variant 3
with extension tube
and suction strainer

Dimensions F 726 PP2-135 and F 726 PVDF2-135

Three-phase motors:
dimension X, Ø Y
and Z see page 22

Minimum or maximum liquid level when starting the pump.
Also valid for the variants 1, 2 and 3.

Basic model
dimension e max. 500 mm

Variant 1
with extension tube
dimension p max. 1000 mm

Variant 2
with suction strainer

Variant 3
with extension tube
and suction strainer
Centrifugal Immersion Pump F 726 PP in polypropylene and F 726 PVDF in polyvinylidenfluoride, version with support bars, without drive motor

Drive motors for Centrifugal Immersion Pump F 726 PP and F 726 PVDF, three-phase motors protected to IP 55, with cable terminable box

Scope of supply
A complete vertical centrifugal immersion pump consists of: drive motor, pump with mounting flange and the necessary accessories. Weight per pump 17 – 30 kg depending on the pump size, immersion length and motor kW.
FLUX Centrifugal Immersion Pump
F 726 PP and F 726 PVDF
In polypropylene or polyvinylidenfluoride size 185 and 230

**Typical applications**
Transferring and circulating of neutral or corrosive liquids in the whole field of the chemical industry and chemical engineering, electroplating industry, steel or stainless steel pickling plants, flue gas decontamination, exhaust air purification, water and waste-water treatment.

**Construction features**
Vertical centrifugal immersion pump for stationary application. The robust pump shaft is mounted in an upper pedestal and supported by two antifriction bearings. This construction, with the bearings spaced along the pedestal, ensures that any radial or axial forces are absorbed, even under heavy load. The result is a very smooth running pump. The solid version with support bars prevents the rotating elements from making contact with the pump housing and guarantees a very long service life, even in continuous use applications. As neither bearing nor seals are in contact with the liquid, the pump is very wear-resistant and suitable for dry running operation. The immersion length of the pump can be extended, up to 1500 mm maximum, by the suction tube option. A suction strainer welded onto the cover of the pump housing or onto the extension tube protects the pump against the ingress of coarse impurities.

A range of carefully chosen impeller diameters, together with a range of three-phase motors in differing kW-ratings, ensures the optimum selection of pumps to meet the specific operating requirements.

**Construction features in detail**
- 2 antifriction bearings located in a pedestal
- Seal kit prevents vapours entering the pedestal
- Robust pump shaft with protective coating
- Version with support bars for temperatures of up to 80 °C (PP) or 100 °C (PVDF)
- Centrifugal impeller in differing diameters
Measured values ± 10% determined with water (20 °C). Nominal speed n = 2850 rpm

In order to achieve the desired output, centrifugal impellers in differing diameters are available.

In determining the absorbed kW of the motor, multiply the absorbed kW shown in the above diagram with the specific gravity of the liquid to be pumped.

Performance chart F 726 PP2-230 and F 726 PVDF2-230
Technical data
Dimensions F 726 PP2-185 and F 726 PVDF2-185

Three-phase motors:
dimension X, Ø Y and Z see page 22

Basic model
dimension e max. 500 mm

Variant 1
with extension tube
dimension p max. 1500 mm

Variant 2
with suction strainer

Variant 3
with extension tube and suction strainer

Dimensions F 726 PP2-230 and F 726 PVDF2-230

Minimum or maximum liquid level
when starting the pump.
Also valid for the variants 1, 2 and 3.

Basic model
dimension e max. 500 mm

Variant 1
with extension tube
dimension p max. 1500 mm

Variant 2
with suction strainer

Variant 3
with extension tube and suction strainer
Centrifugal Immersion Pump F 726 PP in polypropylene and F 726 PVDF in polyvinylidenfluoride, version with support bars, without drive motor

### Drive motor for Centrifugal Immersion Pump F 726 PP and F 726 PVDF,
three-phase motors protected to IP 55, with cable terminal box

<table>
<thead>
<tr>
<th>Capacity P2</th>
<th>Flange Ø</th>
<th>Voltage</th>
<th>Frequency</th>
<th>Nominal speed</th>
<th>Part No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,5 kW</td>
<td>160 mm</td>
<td>230/400 V</td>
<td>50 Hz</td>
<td>2850 rpm</td>
<td>001 00 037</td>
</tr>
<tr>
<td>2,2 kW</td>
<td>160 mm</td>
<td>230/400 V</td>
<td>50 Hz</td>
<td>2850 rpm</td>
<td>001 00 038</td>
</tr>
<tr>
<td>3,0 kW</td>
<td>160 mm</td>
<td>400 V</td>
<td>50 Hz</td>
<td>2850 rpm</td>
<td>001 00 039</td>
</tr>
<tr>
<td>4,0 kW</td>
<td>160 mm</td>
<td>400 V</td>
<td>50 Hz</td>
<td>2850 rpm</td>
<td>001 00 040</td>
</tr>
<tr>
<td>5,5 kW</td>
<td>160 mm</td>
<td>400 V</td>
<td>50 Hz</td>
<td>2850 rpm</td>
<td>001 00 041</td>
</tr>
</tbody>
</table>

Three-phase motors explosion-proof to II 2 G EEx e II T3 with cable terminal box on request.

### Scope of supply
A complete vertical centrifugal immersion pump consists of: drive motor, pump with mounting flange and the necessary accessories. Weight per pump 25 – 75 kg depending on the pump size, immersion length and motor kW.
### Dimensions of three-phase motors protected to IP 55

<table>
<thead>
<tr>
<th>Capacity P2</th>
<th>Nominal speed</th>
<th>X</th>
<th>Ø</th>
<th>Y</th>
<th>Z</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.37 kW</td>
<td>2850 rpm</td>
<td>201</td>
<td>143</td>
<td>183</td>
<td></td>
</tr>
<tr>
<td>0.55 kW</td>
<td>2850 rpm</td>
<td>201</td>
<td>143</td>
<td>183</td>
<td></td>
</tr>
<tr>
<td>0.75 kW</td>
<td>2850 rpm</td>
<td>232</td>
<td>158</td>
<td>201</td>
<td></td>
</tr>
<tr>
<td>1.1 kW</td>
<td>2850 rpm</td>
<td>232</td>
<td>158</td>
<td>201</td>
<td></td>
</tr>
<tr>
<td>1.5 kW</td>
<td>2850 rpm</td>
<td>244</td>
<td>176</td>
<td>227</td>
<td></td>
</tr>
<tr>
<td>2.2 kW</td>
<td>2850 rpm</td>
<td>269</td>
<td>176</td>
<td>227</td>
<td></td>
</tr>
<tr>
<td>3.0 kW</td>
<td>2850 rpm</td>
<td>303</td>
<td>196</td>
<td>252</td>
<td></td>
</tr>
<tr>
<td>4.0 kW</td>
<td>2850 rpm</td>
<td>320</td>
<td>220</td>
<td>277</td>
<td></td>
</tr>
<tr>
<td>5.5 kW</td>
<td>2850 rpm</td>
<td>405</td>
<td>246</td>
<td>313</td>
<td></td>
</tr>
<tr>
<td>2.2 kW</td>
<td>1450 rpm</td>
<td>269</td>
<td>176</td>
<td>227</td>
<td></td>
</tr>
<tr>
<td>3.0 kW</td>
<td>1450 rpm</td>
<td>303</td>
<td>196</td>
<td>252</td>
<td></td>
</tr>
<tr>
<td>4.0 kW</td>
<td>1450 rpm</td>
<td>320</td>
<td>220</td>
<td>277</td>
<td></td>
</tr>
<tr>
<td>5.5 kW</td>
<td>1450 rpm</td>
<td>405</td>
<td>246</td>
<td>313</td>
<td></td>
</tr>
</tbody>
</table>

### Dimensions of three-phase motors explosion-proof to II 2 G Ex e II T3

<table>
<thead>
<tr>
<th>Capacity P2</th>
<th>Nominal speed</th>
<th>X</th>
<th>Ø</th>
<th>Y</th>
<th>Z</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.75 kW</td>
<td>2850 rpm</td>
<td>232</td>
<td>158</td>
<td>212</td>
<td></td>
</tr>
<tr>
<td>1.1 kW</td>
<td>2850 rpm</td>
<td>232</td>
<td>158</td>
<td>212</td>
<td></td>
</tr>
<tr>
<td>1.5 kW</td>
<td>2850 rpm</td>
<td>244</td>
<td>176</td>
<td>237</td>
<td></td>
</tr>
<tr>
<td>2.0 kW</td>
<td>2850 rpm</td>
<td>269</td>
<td>176</td>
<td>237</td>
<td></td>
</tr>
<tr>
<td>2.5 kW</td>
<td>2850 rpm</td>
<td>303</td>
<td>196</td>
<td>256</td>
<td></td>
</tr>
<tr>
<td>3.3 kW</td>
<td>2850 rpm</td>
<td>320</td>
<td>220</td>
<td>279</td>
<td></td>
</tr>
</tbody>
</table>
**Questionnaire to quote on**

**FLUX Vertical Centrifugal Immersion Pumps**

---

**Requested version**

- [ ] for portable application  
- [ ] for stationary application  
- [ ] for horizontal application

**Liquid data**

<table>
<thead>
<tr>
<th>Description</th>
<th>Chemical Formula</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concentration</td>
<td>%</td>
</tr>
<tr>
<td>Viscosity</td>
<td>mPas/cP at °C</td>
</tr>
<tr>
<td>Specific gravity</td>
<td>g/cm³</td>
</tr>
<tr>
<td>Operating temperature</td>
<td>°C</td>
</tr>
<tr>
<td>Solids in suspension</td>
<td>g/l</td>
</tr>
<tr>
<td>Size of solids</td>
<td>mm</td>
</tr>
<tr>
<td>Does liquid crystallize?</td>
<td>Yes, No</td>
</tr>
</tbody>
</table>

Which materials are resistant to liquid according to previous experience?

---

**Operating data**

<table>
<thead>
<tr>
<th>Delivery rate</th>
<th>m³/h</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delivery head</td>
<td>m water column</td>
</tr>
<tr>
<td>Immersion length</td>
<td>mm</td>
</tr>
<tr>
<td>Suction strainer</td>
<td>Yes, No</td>
</tr>
<tr>
<td>Mounting flange in special dimensions:</td>
<td></td>
</tr>
<tr>
<td>outside</td>
<td>mm</td>
</tr>
<tr>
<td>p.c.</td>
<td>mm</td>
</tr>
<tr>
<td>Pressure flange</td>
<td>Yes, No</td>
</tr>
<tr>
<td>outside</td>
<td>mm</td>
</tr>
<tr>
<td>p.c.</td>
<td>mm</td>
</tr>
<tr>
<td>Ø of the container opening</td>
<td>mm</td>
</tr>
<tr>
<td>Operating time per day</td>
<td></td>
</tr>
<tr>
<td>Number of starts</td>
<td></td>
</tr>
</tbody>
</table>

**Drive motor**

- [ ] Three-phase motor
- Operating voltage | Volt | Hz
- Is motor to be explosion-proof? | Yes, No

---

**Quotation to be sent by:**

- [ ] Telephone
- [ ] E-Mail
- [ ] Telefax

Mr. / Mrs: ___________________________  
Title: ___________________________

Company: ___________________________

Address: ___________________________

ZIP / City / Country: ___________________________

Phone: ___________________________  
Telefax: ___________________________

Mobile: ___________________________  
E-Mail: ___________________________
Today the FLUX name is recognised around the globe as the trademark for top standards in pump technology. Everything started with the invention of the electric drum pump in 1950. Nowadays FLUX has an extensive range of products each of which can be customized. FLUX pumps are used for example in the chemical and pharmaceutical industries; in machinery and plant engineering as well as companies in electroplating, effluent treatment and the foodstuffs sector.

Whether single-product or system solution – FLUX quality is synonymous with a long service life, excellent economy and maximum safety.

In addition to the excellent product quality FLUX customers appreciate the superb level of expertise our staff has to offer as well as their genuine customer focus.

These days FLUX-GERÄTE GMBH supplies pumps to almost 100 countries around the globe.