

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 2 500 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.

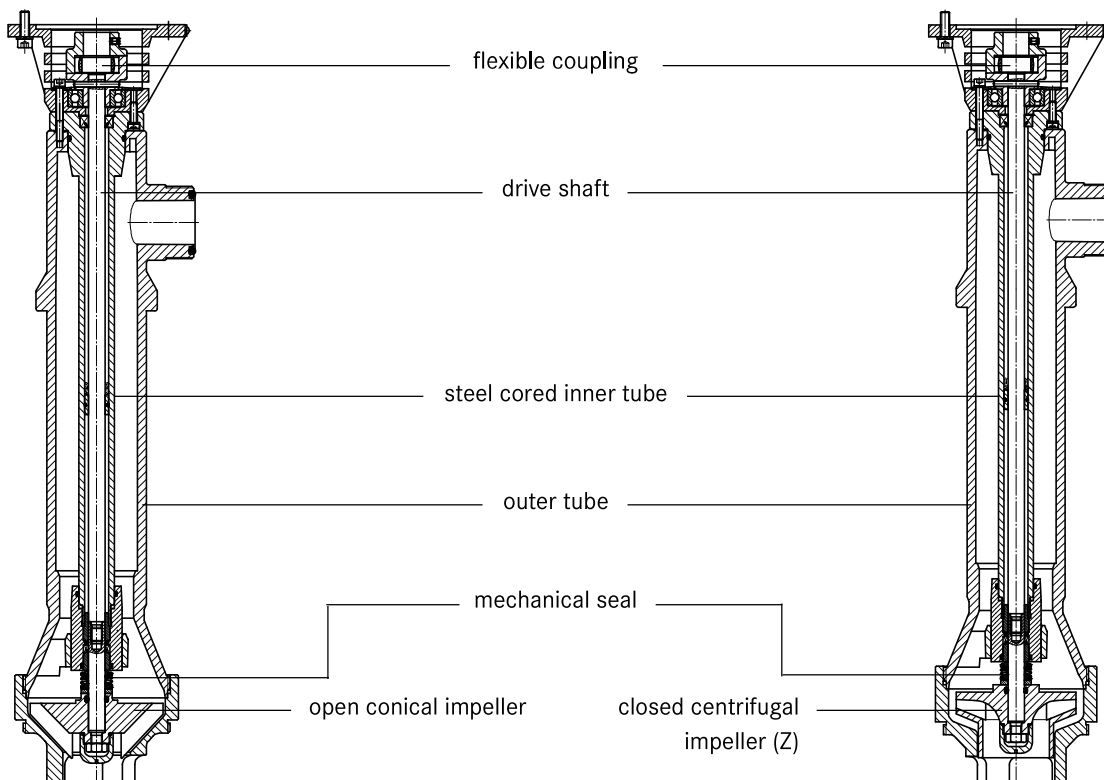
The centrifugal impeller in the pump housing is driven by the motor via the drive shaft. The drive shaft is supported by intermediate bearings within the plastic sleeved steel inner tube, a mechanical seal separating the liquid from the bearings and upper shaft. This construction provides the ultimate 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.



F 640 PP-30
with suction
strainer

Construction features in detail



Centrifugal Immersion Pump F 640 PP in polypropylene,

thread on outlet G 2¼ A, without drive motor

Type/Size	F 640 PP-15	F 640 PP-30	F 640 PP-15 Z	F 640 PP-30 Z
Delivery rate Q max.	17 m ³ /h	29 m ³ /h	21 m ³ /h	34 m ³ /h
Delivery head H max.	8 mwc	10 mwc	10 mwc	11 mwc
Viscosity max.	2 500 mPas	2 500 mPas	150 mPas	150 mPas
Temperature max.	50 °C	50 °C	50 °C	50 °C
Seal type	mechanical seal in ceramic oxide / SiC, o-rings in FKM			
Material	shaft in Hastelloy C, seals in FKM			
Impeller	open conical impeller in PP		closed centrifugal impeller in PP	
Pump housing	Ø 148 mm	Ø 148 mm	Ø 148 mm	Ø 148 mm
Part No.				
Immersion length Dimension e 700 mm	10-640 41 407	10-640 41 607	10-640 41 507	10-640 41 707
Immersion length Dimension e 1 000 mm	10-640 41 410	10-640 41 610	10-640 41 510	10-640 41 710
Immersion length Dimension e 1 500 mm	10-640 41 415	10-640 41 615	10-640 41 515	10-640 41 715

Part numbers for immersion length 400 to 4.000 mm (in steps of 100 mm) on request.

Accessories	Part No.
Mounting flange in polypropylene outside Ø 265 mm, pitch circle Ø 225 mm, 8 bores Ø 18 mm	10-947 14 001
Hose connection in polypropylene, complete with nut G 2¼	
for hose inside diameter DN 32	10-959 04 098
for hose inside diameter DN 38	10-959 04 099
for hose inside diameter DN 50	10-959 04 100

Scope of supply

A complete vertical centrifugal immersion pump consists of: drive motor, pump and necessary accessories.

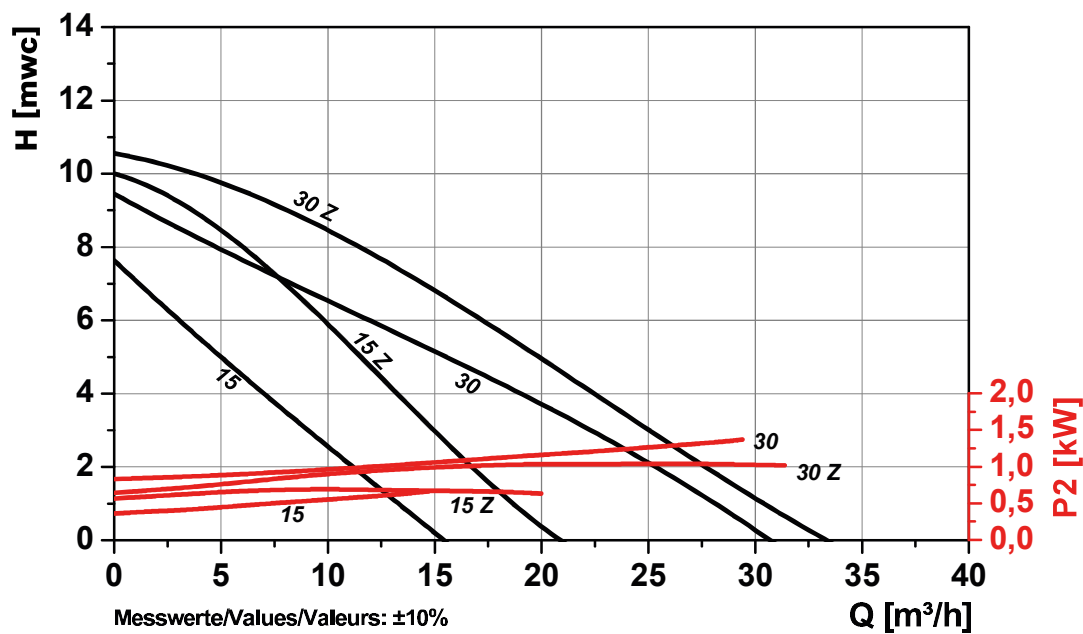
Weight per pump: 15 – 60 kg depending on the pump size, immersion length and motor kW.

FLUX Centrifugal Immersion Pump F 640 PP in polypropylene

Size 15, 30, 15 Z and 30 Z

Technical data

Performance chart F 640 PP-15, F 640 PP-30, F 640 PP-15 Z and F 640 PP-30 Z

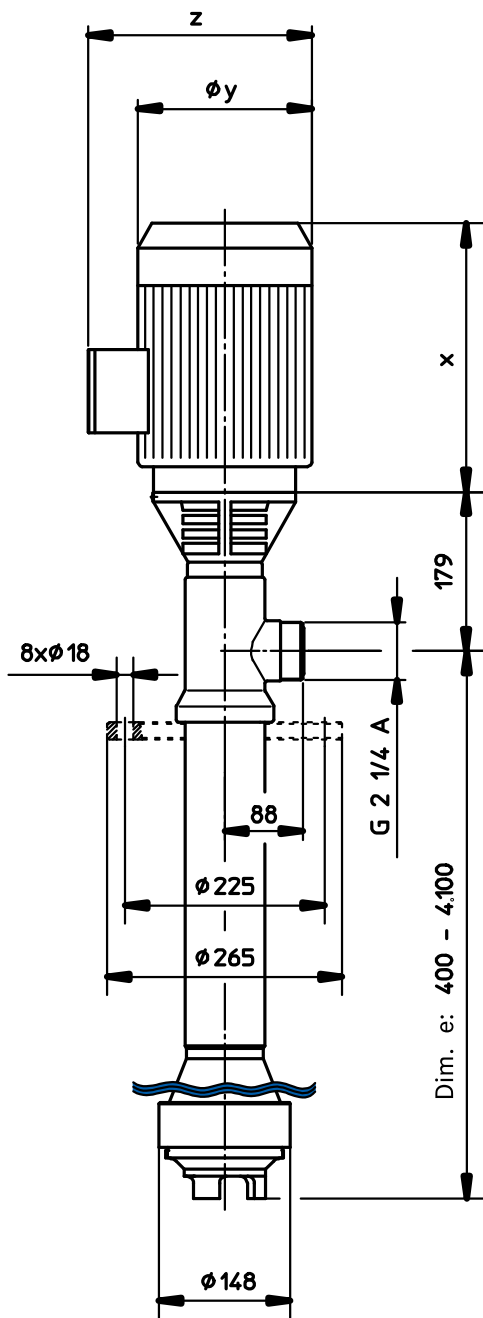


Measured values $\pm 10\%$ determined with water (20 °C). Nominal speed $n = 2\,850$ rpm

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.

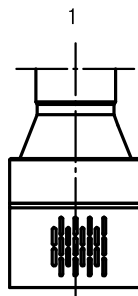
Technical data

Dimensions [mm] F 640 PP-15, F 640 PP-30, F 640 PP-15 Z and F 640 PP-30 Z



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. 4 100 mm

FLUX Centrifugal Immersion Pump F 640 PP and F 640 PVDF

Size 185 and 230

Typical applications

Transferring low flammability liquids up to a viscosity of 2 500 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.

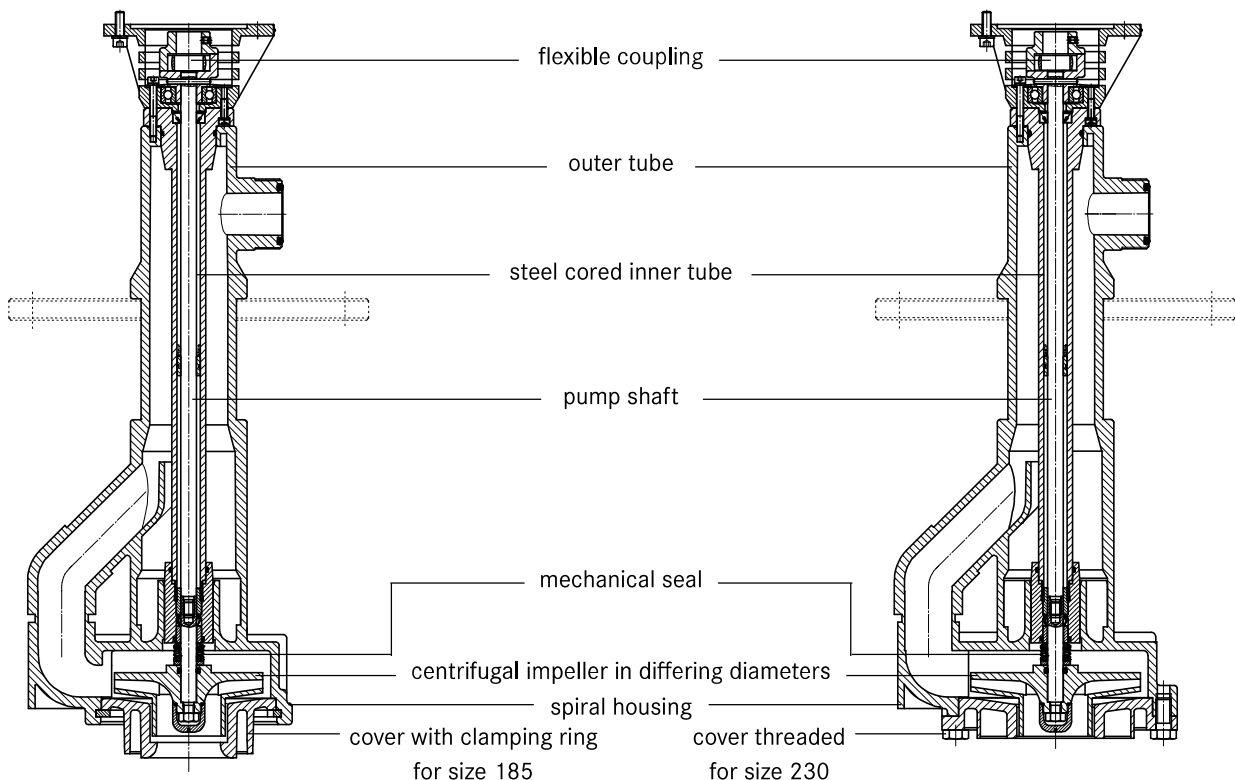
This pump design does not have a separate discharge tube. Immediately after the pump housing the liquid is fed back into the outer tube and delivered to the outlet connection between the inner and outer tubes.

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.



F 640 PP-185
with mounting flange

Construction features in detail



Centrifugal Immersion Pump F 640 PP in polypropylene and F 640 PVDF in polyvinylidene fluoride,

thread on outlet G 2¼ A, without drive motor

Type/Size	F 640 PP-185	F 640 PVDF-185	F 640 PP-230	F 640 PVDF-230
Delivery rate Q max.	40 m ³ /h	40 m ³ /h	42 m ³ /h	42 m ³ /h
Delivery head H max.	23 mwc	23 mwc	32 mwc	32 mwc
Viscosity max.	150 mPas	150 mPas	150 mPas	150 mPas
Temperature max.	60 °C	80 °C	60 °C	80 °C
Seal type	mechanical seal in ceramic oxide /SiC, o-rings in FKM			
Material	shaft in Hastelloy C, seals in FKM			
Impeller	Ø 100 – 140 mm in PP or PVDF		Ø 130 – 160 mm in PP or PVDF	
Pump housing	Ø 249 mm		Ø 264 mm	
Part No.				
Immersion length Dimension e 1 000 mm	10-640 41 210	10-640 61 210	10-640 41 310	10-640 61 310
Immersion length Dimension e 1 500 mm	10-640 41 215	10-640 61 215	10-640 41 315	10-640 61 315
Immersion length Dimension e 2 000 mm	10-640 41 220	10-640 61 220	10-640 41 320	10-640 61 320

Part numbers for immersion length 400 to 4 100 mm (in steps of 100 mm) on request.
From dimension 2 100 mm with welded pump housing part number 10-640 42 ... or rather 10-640 62 ...

Accessories	Part No.
Mounting flange in polypropylene to dimension 2 000 mm: outside Ø 340 mm, pitch circle Ø 295 mm, 4 bores Ø 22 mm from dimension 2 100 mm: outside Ø 445 mm, pitch circle Ø 400 mm, 4 bores Ø 22 mm	10-947 14 049 10-947 14 084
Mounting flange in polyvinylidene fluoride to dimension 2 000 mm: outside Ø 340 mm, pitch circle Ø 295 mm, 4 bores Ø 22 mm from dimension 2 100 mm: outside Ø 445 mm, pitch circle Ø 400 mm, 4 bores Ø 22 mm	10-947 14 070 10-947 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	10-959 04 098
for hose inside diameter DN 38	10-959 04 099
for hose inside diameter DN 50	10-959 04 100
Hose connection in polyvinylidene fluoride, complete with nut	
for hose inside diameter DN 32	10-959 04 104
for hose inside diameter DN 38	10-959 04 105
for hose inside diameter DN 50	10-959 04 096

Scope of supply

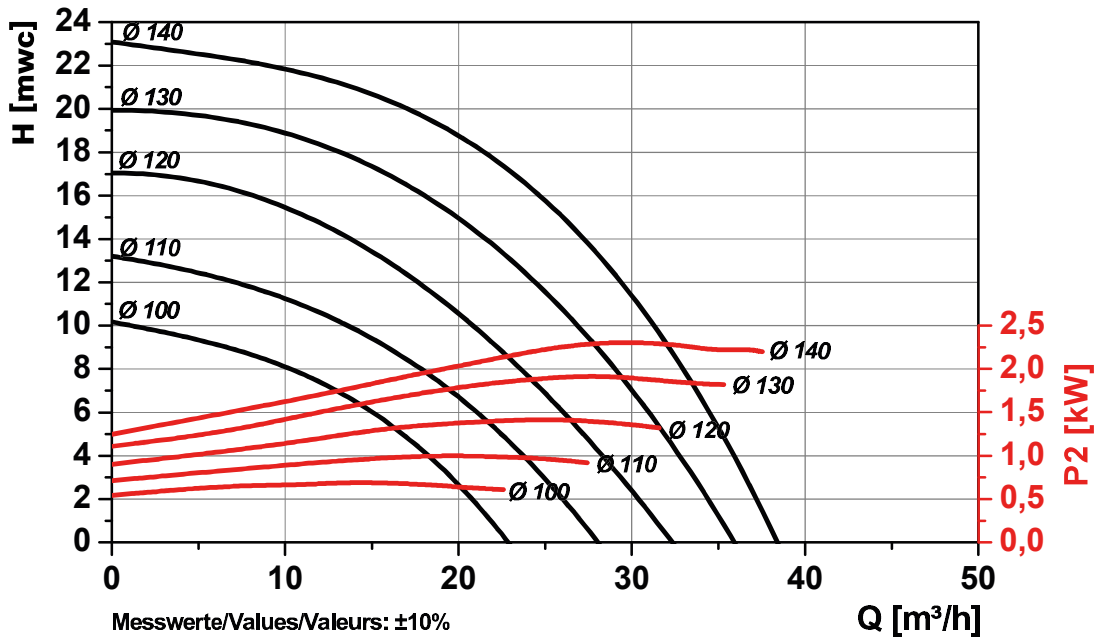
A complete vertical centrifugal immersion pump consists of: drive motor, pump with mounting flange and necessary accessories.
Weight per pump: 20 – 70 kg depending on the pump size, immersion length and motor kW.

FLUX Centrifugal Immersion Pump F 640 PP and F 640 PVDF

Size 185 and 230

Technical data

Performance chart F 640 PP-185 and F 640 PVDF-185

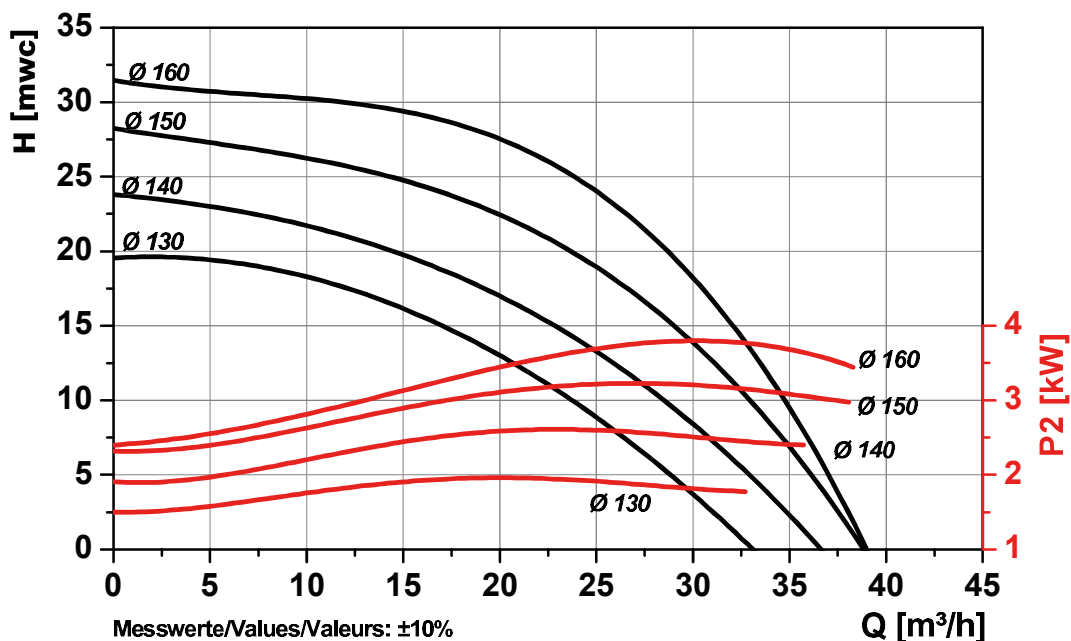


Measured values ± 10 % determined with water (20 °C). Nominal speed n = 2 850 rpm

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

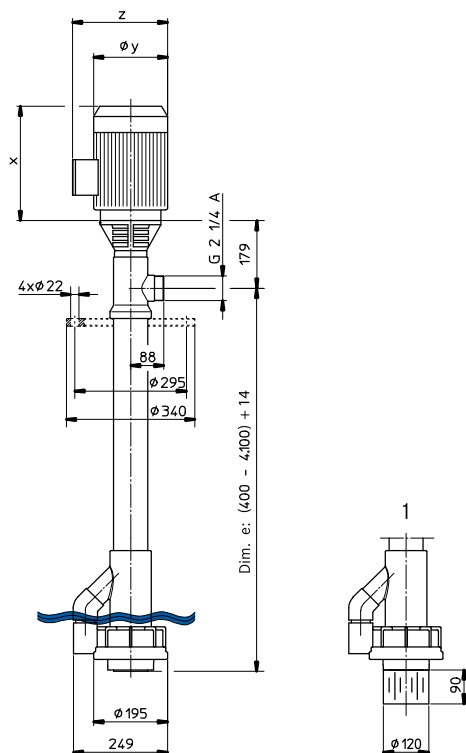
In determining the absorbed kW of the motor, multiply the absorbed kW shown in the above diagram with the specific gravity of the liquid to be pumped.

Performance chart F 640 PP-230 and F 640 PVDF-230



Technical data

Dimensions [mm] F 640 PP-185 and F 640 PVDF-185

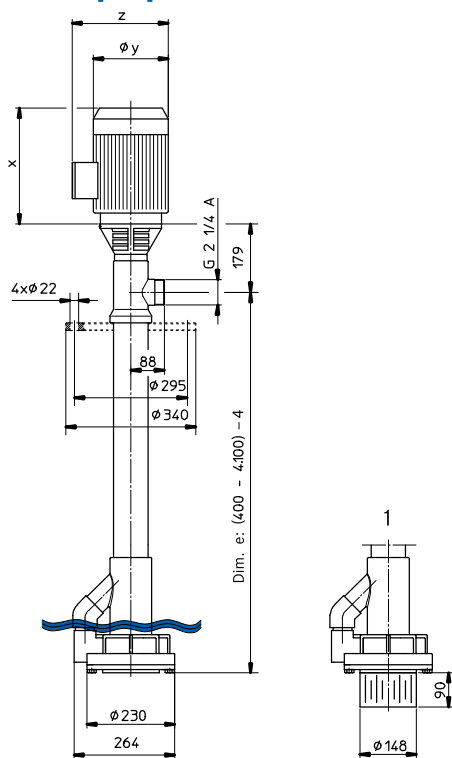


Basic model dimension e
max. 4 100 mm

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

Variant 1
with suction strainer
dimension e + 90 mm

Dimensions [mm] F 640 PP-230 and F 640 PVDF-230



Basic model dimension e
max. 4 100 mm

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

Variant 1
with suction strainer
dimension e + 90 mm