

FLUX CENTRIFUGAL IMMERSION PUMPS – QUALITY THAT SETS STANDARDS

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.



SAFE, 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.

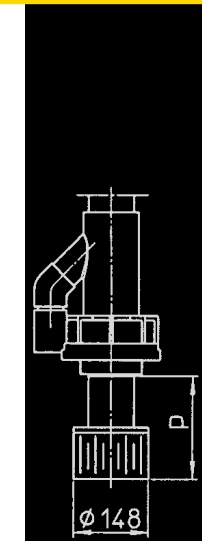
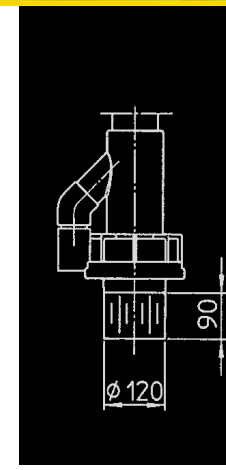
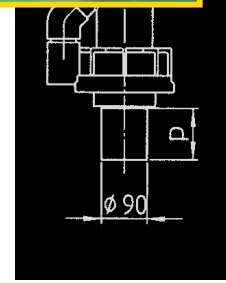
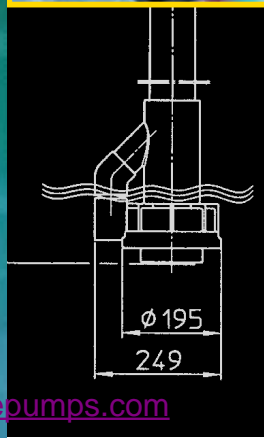


Type F 706:
4 different sizes, sealless design with sleeve bearing, immersion length up to 20m

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

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

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



CENTRIFUGAL IMMERSION PUMP F 716 PP IN POLYPROPYLENE, WITH INTEGRAL THREE-PHASE MOTOR

Type / Size	F 716 PP1-185	F 716 PP2-185	F 716 PP1-230	F 716 PP2-230
Version	with support tube	with support bars	with support tube	with support bars
Delivery rate Q max.	38 m ³ /h	38 m ³ /h	45 m ³ /h	45 m ³ /h
Delivery head H max.	23 m water column	23 m water column	35 m water column	35 m water column
Viscosity max.	150 mPas (cP)	150 mPas (cP)	150 mPas (cP)	150 mPas (cP)
Temperature max.	60 °C	80 °C	60 °C	80 °C
Seal material	no bearings nor seals in contact with the liquid			
Material	shaft in stainless steel 1.4571/316 Ti with protective coating in PP			
Centrifugal impeller in PP	Ø 100 – 140 mm	Ø 100 – 140 mm	Ø 130 – 160 mm	Ø 130 – 160 mm
Pump housing	Ø 249 mm	Ø 249 mm	Ø 264 mm	Ø 264 mm
Mounting flange in PP	outside Ø 340 mm	outside Ø 340 mm	outside Ø 340 mm	outside Ø 340 mm
Thread on outlet	G 2 1/4 A (BSP 2 1/4" male)	G 2 1/4 A (BSP 2 1/4" male)	G 2 1/4 A (BSP 2 1/4" male)	G 2 1/4 A (BSP 2 1/4" male)
Part No.				
Motor capacity P2	1,5 kW	1,5 kW	3,0 kW	3,0 kW
Immersion length				
Dimension e				
300 mm	716 41 203	716 42 203	716 41 303	716 42 303
400 mm	716 41 204	716 42 204	716 41 304	716 42 304
500 mm	716 41 205	716 42 205	716 41 305	716 42 305
Motor capacity P2	2,2 kW	2,2 kW	4,0 kW	4,0 kW
Immersion length				
Dimension e				
300 mm	716 41 213	716 42 213	716 41 313	716 42 313
400 mm	716 41 214	716 42 214	716 41 314	716 42 314
500 mm	716 41 215	716 42 215	716 41 315	716 42 315
Motor capacity P2	3,0 kW	3,0 kW	5,5 kW	5,5 kW
Immersion length				
Dimension e				
300 mm	716 41 223	716 42 223	716 41 323	716 42 323
400 mm	716 41 224	716 42 224	716 41 324	716 42 324
500 mm	716 41 225	716 42 225	716 41 325	716 42 325
Motor capacity P2	4,0 kW	4,0 kW		
Immersion length				
Dimension e				
300 mm	716 41 233	716 42 233		
400 mm	716 41 234	716 42 234		
500 mm	716 41 235	716 42 235		

CENTRIFUGAL IMMERSION PUMP F 716 PVDF IN POLYVINYLIDENFLUORIDE, WITH INTEGRAL THREE-PHASE MOTOR

Type / Size	F 716 PVDF2-185	F 716 PVDF2-230
Version	with support bars	with support bars
Delivery rate Q max.	38 m ³ /h	45 m ³ /h
Delivery head H max.	23 m water column	35 m water column
Viscosity max.	150 mPas (cP)	150 mPas (cP)
Temperature max.	100 °C	100 °C
Seal material	no bearings nor seals in contact with the liquid	
Material	shaft in stainless steel 1.4571/316 Ti with protective coating in PVDF	
Centrifugal impeller in PVDF	Ø 100 – 140 mm	Ø 130 – 160 mm
Pump housing	Ø 249 mm	Ø 264 mm
Mounting flange in RCH1000	outer Ø 340 mm	outer Ø 340 mm
Thread on outlet	G 2 1/4 A	G 2 1/4 A
Part No.		
Motor capacity P2	1,5 kW	2,2 kW
Immersion length		
Dimension e		
300 mm	716 62 203	716 62 213
400 mm	716 62 204	716 62 214
500 mm	716 62 205	716 62 215
Puissance de moteur P2	3,0 kW	4,0 kW
Immersion length		
Dimension e		
300 mm	716 62 223	716 62 233
400 mm	716 62 224	716 62 234
500 mm	716 62 225	716 62 235

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.

CENTRIFUGAL IMMERSION PUMP F 716 PP AND F 716 PVDF

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.



F 726 PP2-115

F 726 PVDF2-135

CONSTRUCTION FEATURES IN DETAIL

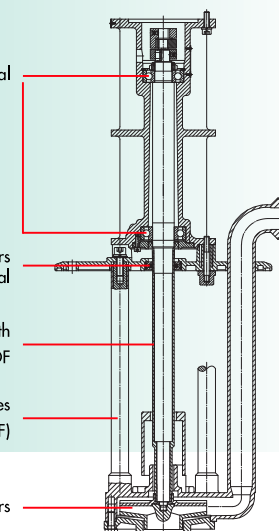
2 antifriction bearings located in a pedestal

seal kit prevents vapours entering the pedestal

robust pump shaft with protective coating in PP or PVDF

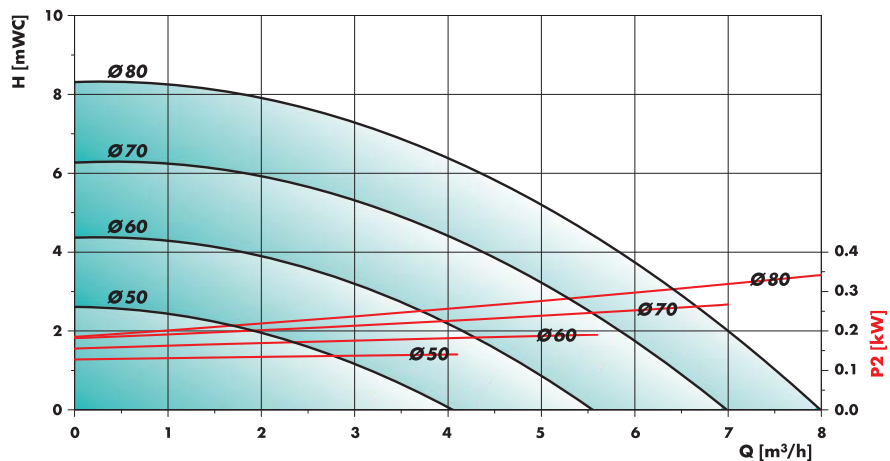
version with support bars for temperatures up to 80 °C (PP) or 100 °C (PVDF)

centrifugal impeller in differing diameters



TECHNICAL DATA

Performance chart F 726 PP2-115 and F 726 PVDF2-115

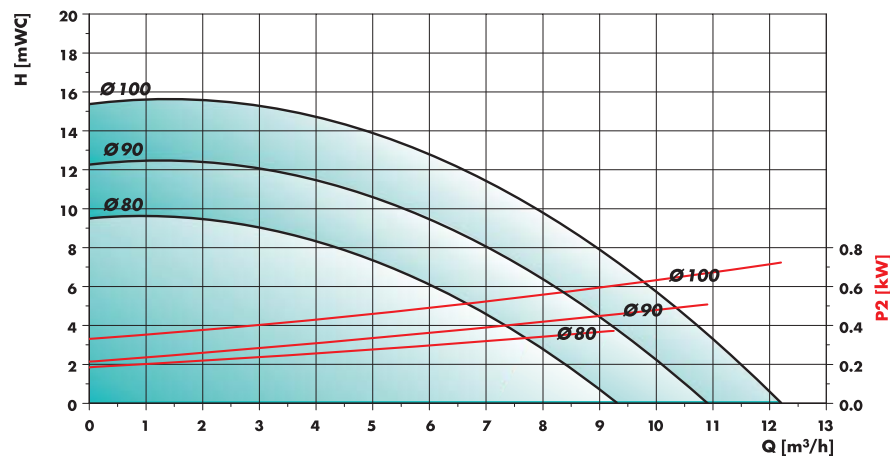


Measured values $\pm 10\%$ determined with water (20 °C). Nominal speed $n = 2850$ rpm

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

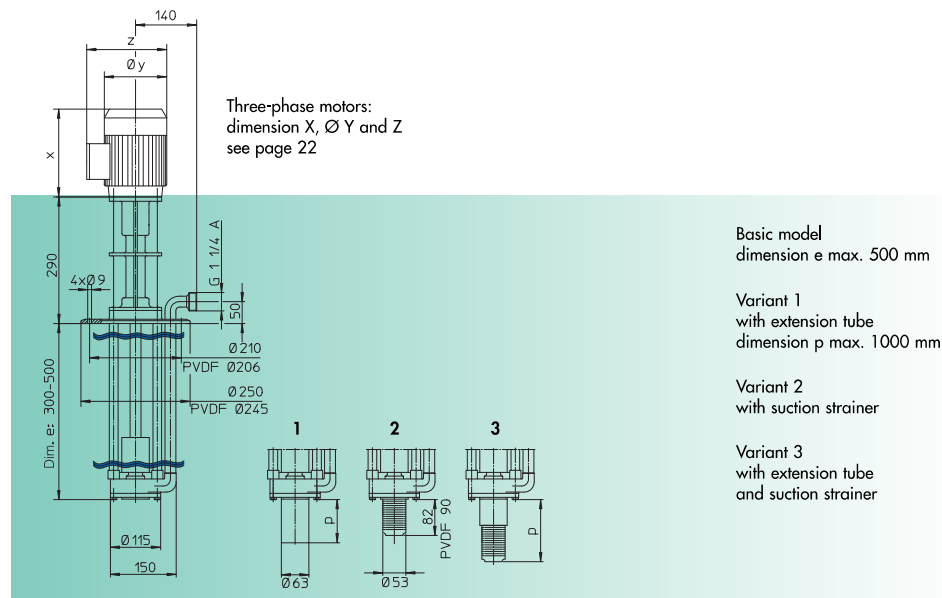
In determining the absorbed kW of the motor, multiply the absorbed kW shown in the above diagram with the specific gravity of the liquid to be pumped.

Performance chart F 726 PP2-135 and F 726 PVDF2-135

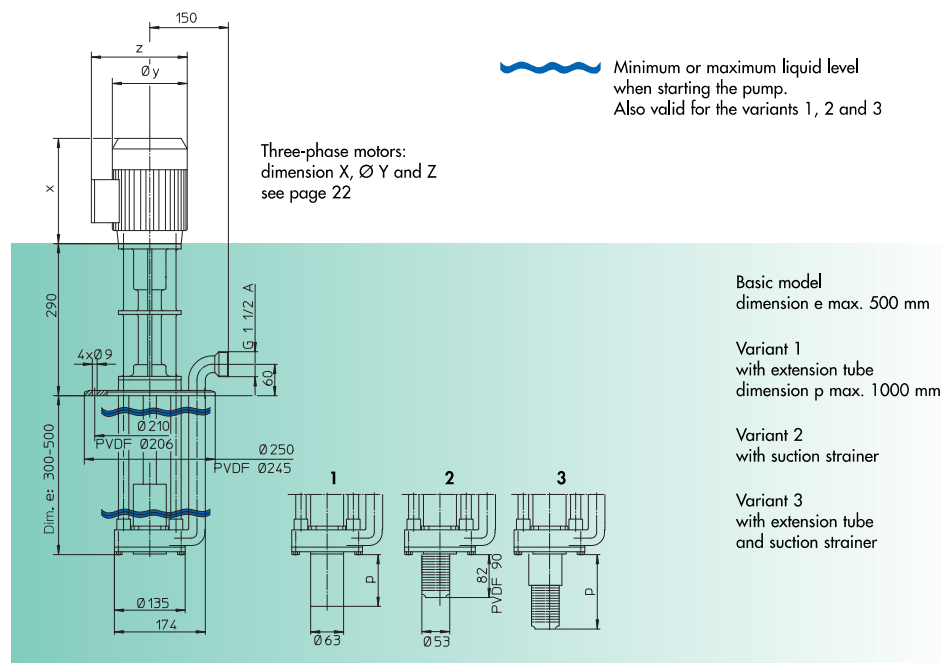


TECHNICAL DATA

Dimensions F 726 PP2-115 and F 726 PVDF2-115



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



CENTRIFUGAL IMMERSION PUMP F 726 PP IN POLYPROPYLENE AND F 726 PVDF IN POLYVINYLIDENFLUORIDE, VERSION WITH SUPPORT BARS, WITHOUT DRIVE MOTOR

Type / Size	F 726 PP2-115	F 726 PP2-135	F 726 PVDF2-115	F 726 PVDF2-135	
Delivery rate Q max.	8 m ³ /h	12 m ³ /h	8 m ³ /h	12 m ³ /h	
Delivery head H max.	8 m water column	15 m water column	8 m water column	15 m water column	
Viscosity max.	150 mPas (cP)	150 mPas (cP)	150 mPas (cP)	150 mPas (cP)	
Temperature max.	80 °C	80 °C	100 °C	100 °C	
Seal material	no bearings nor seals in contact with the liquid				
Material	shaft in stainless steel 1.4571/316 Ti with protective coating in PP				
Centrifugal impeller in PP or PVDF	Ø 50 – 80 mm	Ø 80 – 100 mm	Ø 50 – 80 mm	Ø 80 – 100 mm	
Pump housing	Ø 150 mm	Ø 174 mm	Ø 150 mm	Ø 174 mm	
Mounting flange in PP or PVDF	outside Ø 250 mm	outside Ø 250 mm	outside Ø 245 mm	outside Ø 245 mm	
Thread on outlet	G 1 1/4 A (BSP 1 1/4" male)	G 1 1/2 A (BSP 1 1/2" male)	G 1 1/4 A (BSP 1 1/4" male)	G 1 1/2 A (BSP 1 1/2" male)	
Part No.					
Immersion length	300 mm	726 42 003	726 42 103	726 62 003	726 62 103
Dimension e	400 mm	726 42 004	726 42 104	726 62 004	726 62 104
	500 mm	726 42 005	726 42 105	726 62 005	726 62 105

Accessories:

Extension tube in PP or PVDF in steps of 100 mm. Dimension p up to. max. 1000 mm.

Suction strainer in PP or PVDF welded onto the cover of the pump housing or onto the extension tube.

DRIVE MOTORS FOR CENTRIFUGAL IMMERSION PUMPS F 726 PP AND F 726 PVDF

Three-phase motors protected to IP 55, with cable terminable box

Capacity P 2	Flange Ø	Voltage	Frequency	Nominal speed	Part No.
0,37 kW	120 mm	230/400 V	50 Hz	2850 rpm	001 00 004
0,55 kW	120 mm	230/400 V	50 Hz	2850 rpm	001 00 005
0,75 kW	120 mm	230/400 V	50 Hz	2850 rpm	001 00 019

Drive motors explosion-proof to 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 17 – 30 kg depending on the pump size, immersion length and motor kW.

CENTRIFUGAL IMMERSION PUMP F 726 PP AND F 726 PVDF

FLUX CENTRIFUGAL IMMERSION PUMPS 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.



F 726 PP2-185

F 726 PVDF2-230

CONSTRUCTION FEATURES IN DETAIL

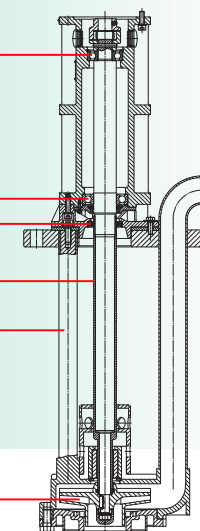
2 antifriction bearings located in a pedestal

seal kit prevents vapours entering the pedestal

robust pump shaft with protective coating

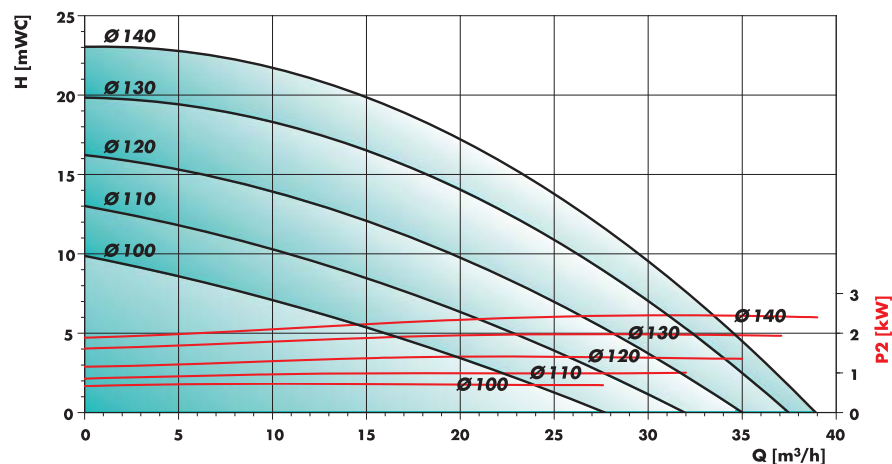
version with support bars for temperatures of up to 80 °C (PP) or 100 °C (PVDF)

centrifugal impeller in differing diameters



TECHNICAL DATA

Performance chart F 726 PP2-185 and F 726 PVDF2-185

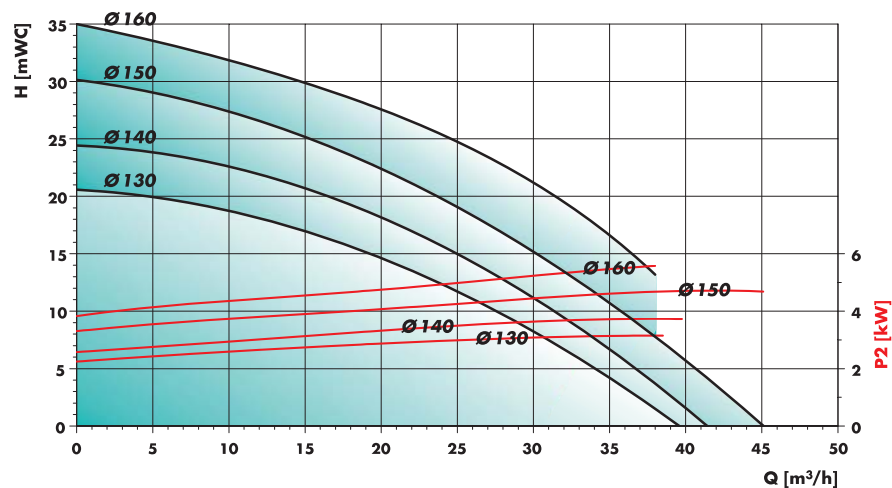


Measured values $\pm 10\%$ determined with water (20 °C). Nominal speed $n = 2850$ rpm

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

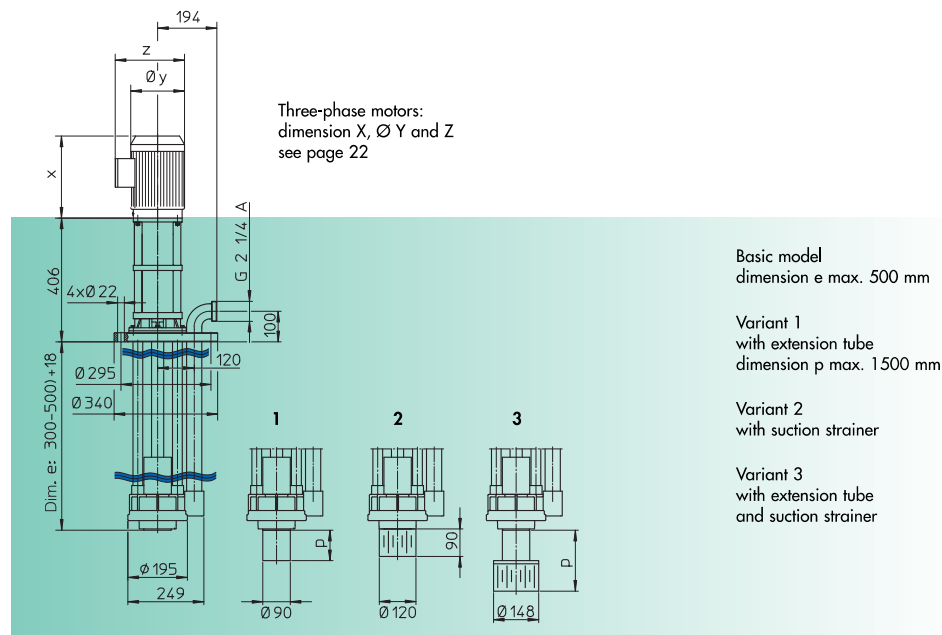
In determining the absorbed kW of the motor, multiply the absorbed kW shown in the above diagram with the specific gravity of the liquid to be pumped.

Performance chart F 726 PP2-230 and F 726 PVDF2-230

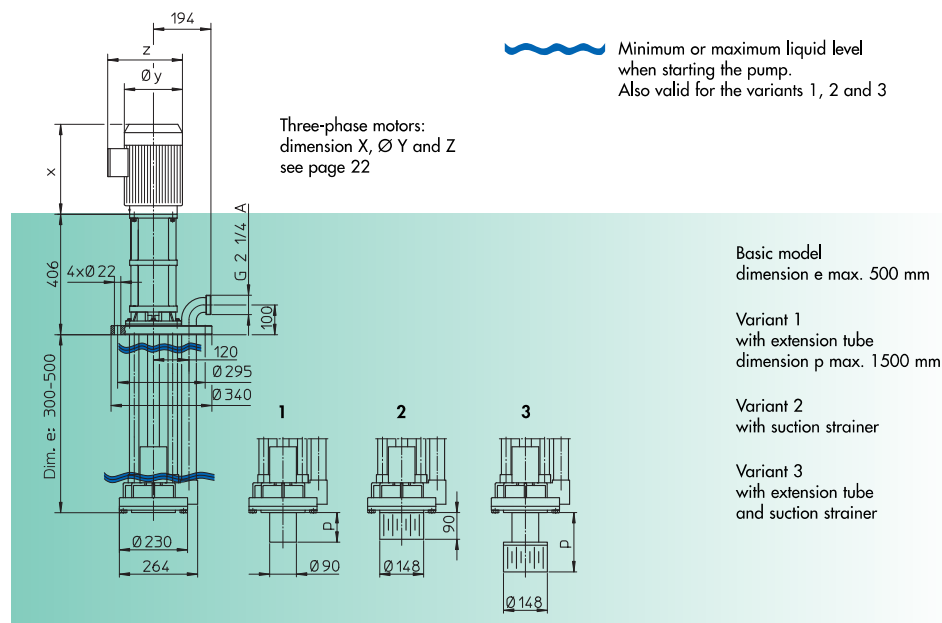


TECHNICAL DATA

Dimensions F 726 PP2-185 and F 726 PVDF2-185



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



CENTRIFUGAL IMMERSION PUMP F 726 PP IN POLYPROPYLENE AND F 726 PVDF IN POLYVINYLIDENFLUORIDE, VERSION WITH SUPPORT BARS, WITHOUT DRIVE MOTOR

Type / Size	F 726 PP2-185	F 726 PP2-230	F 726 PVDF2-185	F 726 PVDF2-230
Delivery rate Q max.	38 m ³ /h	45 m ³ /h	38 m ³ /h	45 m ³ /h
Delivery head H max.	23 m water column	35 m water column	23 m water column	35 m water column
Viscosity max.	150 mPas (cP)	150 mPas (cP)	150 mPas (cP)	150 mPas (cP)
Temperature max.	80 °C	80 °C	100 °C	100 °C
Seal material	no bearings nor seals in contact with the liquid			
Material	shaft in stainless steel 1.4571/316 Ti with protective coating in PP			
Centrifugal impeller in PP or PVDF	Ø 100 – 140 mm	Ø 130 – 160 mm	Ø 100 – 140 mm	Ø 130 – 160 mm
Pump housing	Ø 249 mm	Ø 264 mm	Ø 249 mm	Ø 264 mm
Mounting flange in PP or RCH 1000	outside Ø 340 mm	outside Ø 340 mm	outside Ø 340 mm	outside Ø 340 mm
Thread on outlet	G 2 1/4 A (BSP 2 1/4" male)	G 2 1/4 A (BSP 2 1/4" male)	G 2 1/4 A (BSP 2 1/4" male)	G 2 1/4 A (BSP 2 1/4" male)
Part No.				
Immersion length	300 mm	726 42 203	726 42 303	726 62 203
Dimension e	400 mm	726 42 204	726 42 304	726 62 204
	500 mm	726 42 205	726 42 305	726 62 205

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.

DRIVE MOTOR FOR CENTRIFUGAL IMMERSION PUMP F 726 PP

Three-phase motors protected to IP 55, with cable terminal box

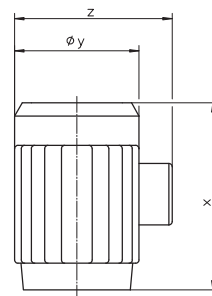
Capacity P 2	Flange Ø	Voltage	Frequency	Nominal speed	Part No.
1,5 kW	160 mm	230/400 V	50 Hz	2850 rpm	001 00 008
2,2 kW	160 mm	230/400 V	50 Hz	2850 rpm	001 00 009
3,0 kW	160 mm	400 V	50 Hz	2850 rpm	001 00 010
4,0 kW	160 mm	400 V	50 Hz	2850 rpm	001 00 011
5,5 kW	160 mm	400 V	50 Hz	2850 rpm	001 00 015

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

SCOPE OF SUPPLY

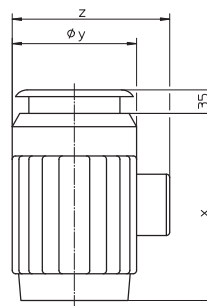
A complete vertical centrifugal immersion pump consists of: drive motor, pump with mounting flange and the necessary accessories. Weight per pump 25 – 75 kg depending on the pump size, immersion length and motor kW.

DIMENSIONS OF THREE-PHASE MOTORS PROTECTED TO IP 55



Capacity P 2	Nominal speed	X	Ø Y	Z
0,37 kW	2850 rpm	201	143	183
0,55 kW	2850 rpm	201	143	183
0,75 kW	2850 rpm	232	158	201
1,1 kW	2850 rpm	232	158	201
1,5 kW	2850 rpm	244	176	227
2,2 kW	2850 rpm	269	176	227
3,0 kW	2850 rpm	303	196	252
4,0 kW	2850 rpm	320	220	277
5,5 kW	2850 rpm	405	246	313
3,0 kW	1450 rpm	303	196	252
4,0 kW	1450 rpm	320	220	277
5,5 kW	1450 rpm	405	246	313

DIMENSIONS OF THREE-PHASE MOTORS EXPLOSION-PROOF TO EEX e II T3



Capacity P 2	Nominal speed	X	Ø Y	Z
0,75 kW	2850 rpm	232	158	212
1,1 kW	2850 rpm	232	158	212
1,5 kW	2850 rpm	244	176	237
2,0 kW	2850 rpm	269	176	237
2,5 kW	2850 rpm	303	196	256
3,3 kW	2850 rpm	320	220	279

CENTRIFUGAL IMMERSION PUMP F 726 PP AND F 726 PVDF