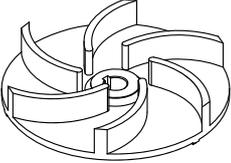


<b>HYDROPOMPE</b>	<b>VORTEX IMPELLER</b>	<b>DN 80</b>
<b>F SERIES</b>		<b>50 Hz</b>
<b>304/402-404/412</b>		<b>4 POLE</b>

#### USE

Submersible electric pumps particularly suitable for pumping industrial sewage, screened waste water and mud in the pumping stations. They can be used also to lift clear and dirty water and rain water.

#### MATERIALS

##### Motor housing

Cast iron EN GJL 200 (UNI EN 1561)

##### Pump housing

Cast iron EN GJL 200 (UNI EN 1561)

##### Bearing housing

Cast iron EN GJL 200 (UNI EN 1561)

##### Impeller

Cast iron EN GJL 200 (UNI EN 1561)

##### Seal motor side

Seal ring

##### Mechanical seal impeller side

Silicon Carbide/Silicon Carbide (SiC/SiC)

##### Supporting feet

Stainless steel AISI 304

##### Motor shaft

Stainless steel AISI 420

##### Bolts and nuts

Stainless steel Grade A2

##### Cable

10.5 meters type H07RN-F 4G2,5mm<sup>2</sup>

#### LIMITS TO USE

##### Max temperature of the liquid pumped

+40°C

##### pH of the liquid pumped

6÷10

##### Max immersion depth

20 m

##### Liquid density

1,0 kg/dm<sup>3</sup>

##### Min immersion depth for continuous service

304/402 487 mm

404/412 551 mm

##### Free passage

75 mm

##### Max number starts/hour

20

##### Acoustic pressure level issued

<70dB(A)

#### MOTOR

The electric motor is asynchronous with squirrel cage rotor in dry chamber

Class of insulation F

Protection degree IP68

4pole; 50Hz

Main voltage values and relative tolerance in relation to the rated voltage value:

##### THREE-PHASE

230V ±10%

400V ±10%

Other voltages on request.

#### OTHER FEATURES ON REQUEST

Frequency 60 Hz (*see specific catalogue*)

Other voltages

With food grade white oil

#### TECHNICAL DATA

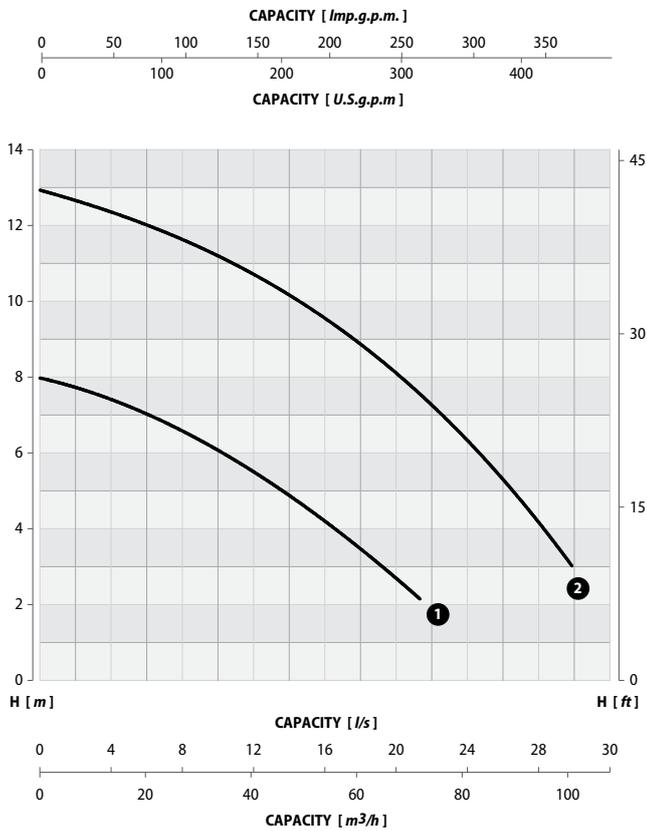
MODEL	P1 kW	P2		VOLTAGE V	CURRENT A	CABLE m	WEIGHT kg
		kW	CV				
<b>304/402</b>	3,8	2,2	3,0	230/400 (3~)	11,2/6,5	10	73
<b>404/412</b>	5,0	3,1	4,2	230/400 (3~)	14,7/8,5	10	86

<b>F SERIES</b>	<b>304/402-404/412</b>		<b>VORTEX IMPELLER</b>	<b>DN 80</b>
				<b>50 Hz</b>
				<b>4 POLE</b>

**PERFORMANCE RANGE**

CAPACITY												
<i>l/s</i>	0	4	8	12	14	16	18	20	22	24	26	28
<i>m³/h</i>	0	14,4	28,8	43,2	50,4	57,6	64,8	72,0	79,2	86,4	93,6	100,8
<i>l/min</i>	0	240	480	720	840	960	1080	1200	1320	1440	1560	1680

MODEL	CURVE <i>N°</i>	HEAD <i>m</i>											
		<b>304/402</b>	1	8,0	7,3	6,5	5,3	4,5	3,9	2,9	2,2	-	-
<b>404/412</b>	2	13,0	12,2	11,5	10,5	10,0	9,2	8,4	7,7	6,5	5,5	4,1	3,2



Performance tolerance in according to UNI/ISO 9906 Grade 2

**F SERIES**

**304/402-404/412**



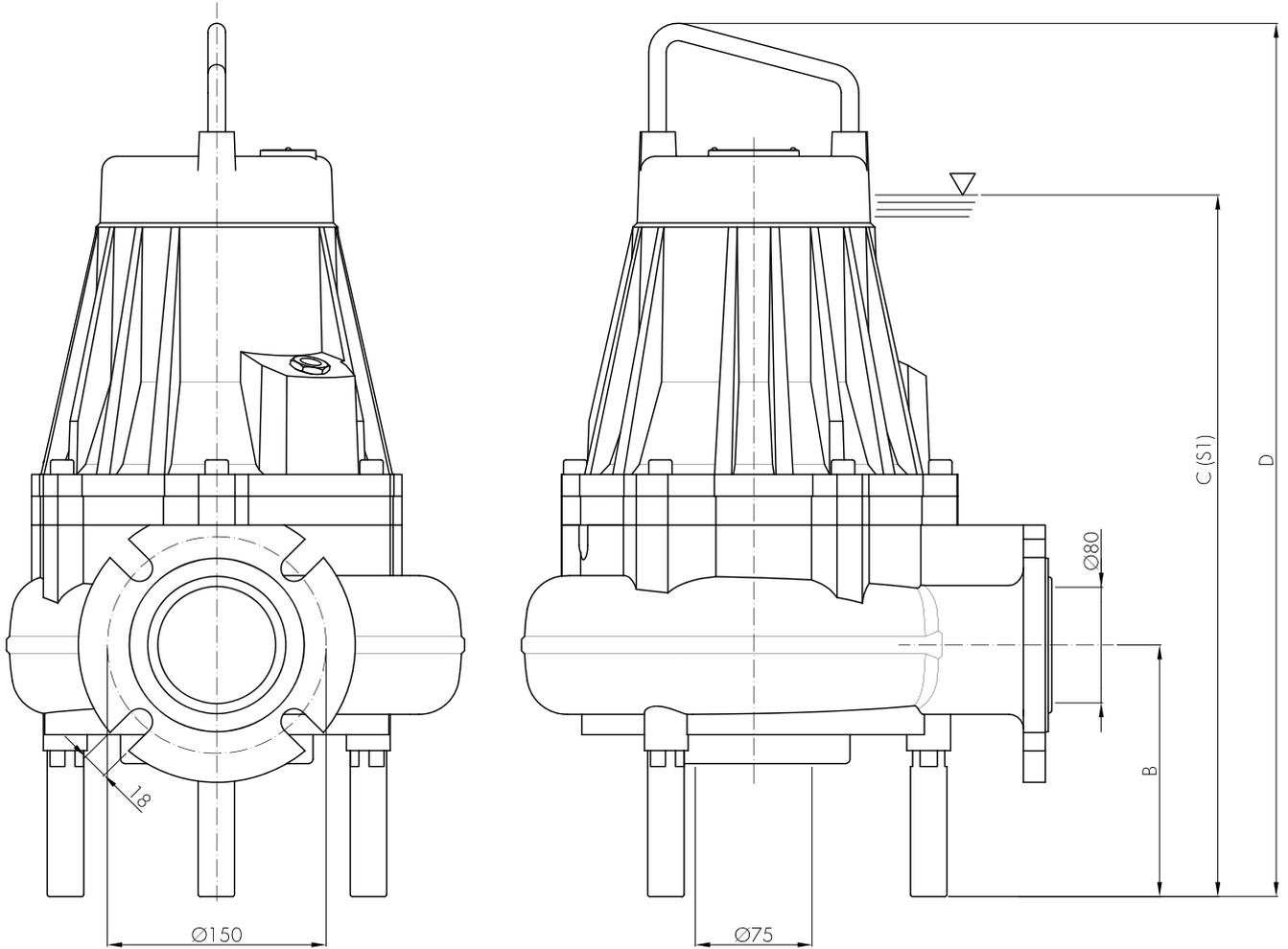
**VORTEX IMPELLER**

**DN 80**

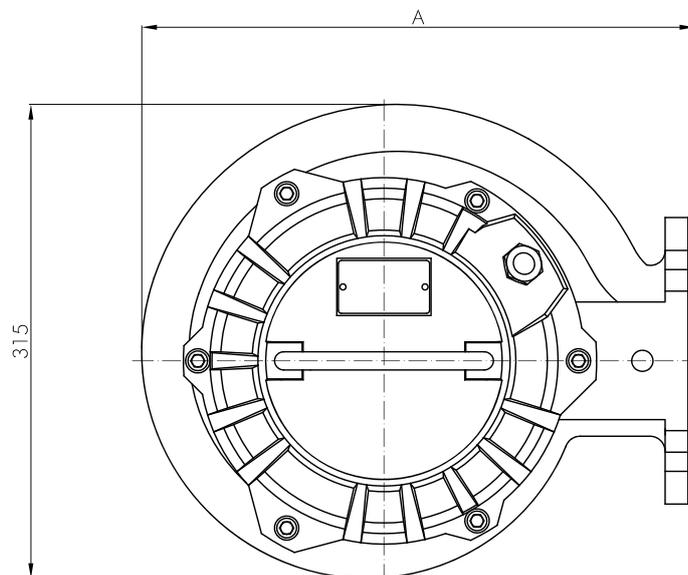
**50 Hz**

**4 POLE**

**INSTALLATION DIMENSIONS**



	A	B	C (S1)	D
304/402	364	174	487	604
404/412	412	202	551	668



# F SERIES

304/402-404/412



VORTEX IMPELLER

DN 80

50 Hz

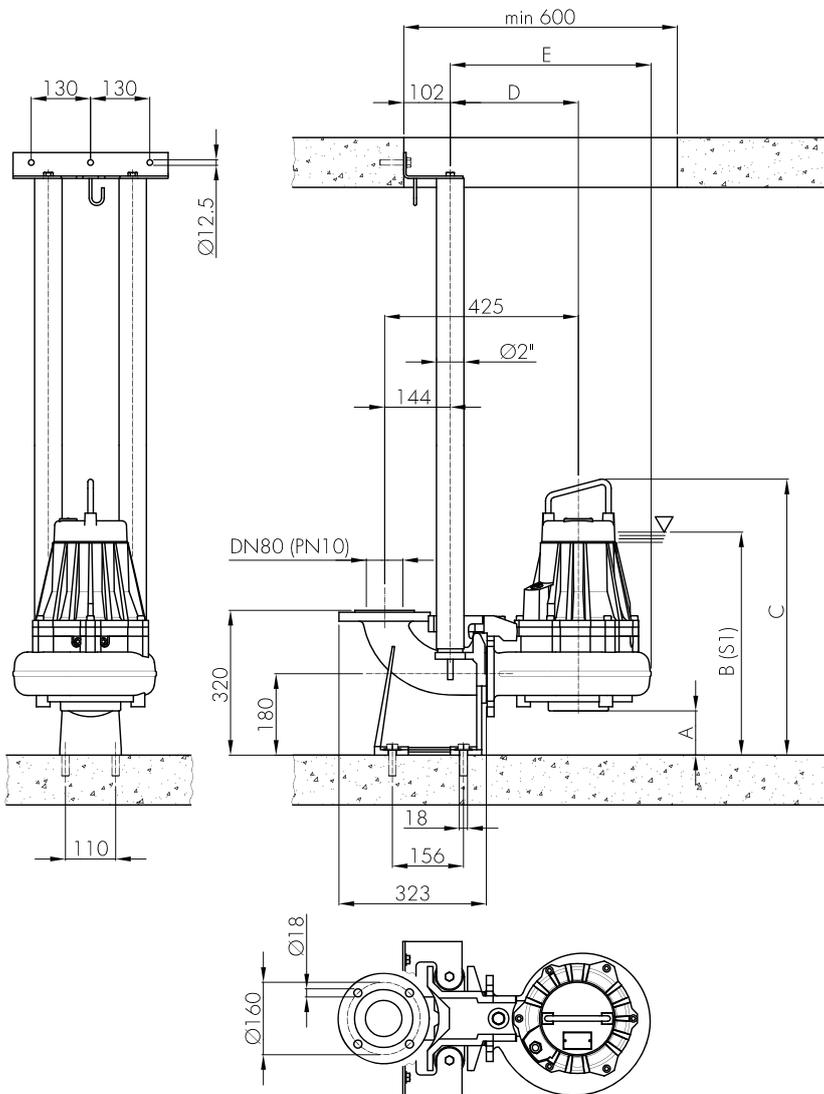
4 POLE

## PERMANENT INSTALLATION WITH COUPLING SYSTEM

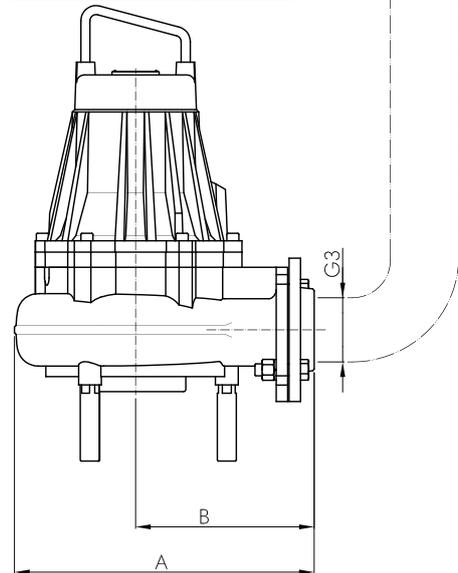
It is the recommended installation for the permanent pumping station. The electric pump is guided by two pipes and it is connected automatically to the coupling system. The quick connection ensures that the pump can be easily removed and re-installed.

## PORTABLE INSTALLATION

Transportable as emergency pump with connection to the hose and for free installation in the well.



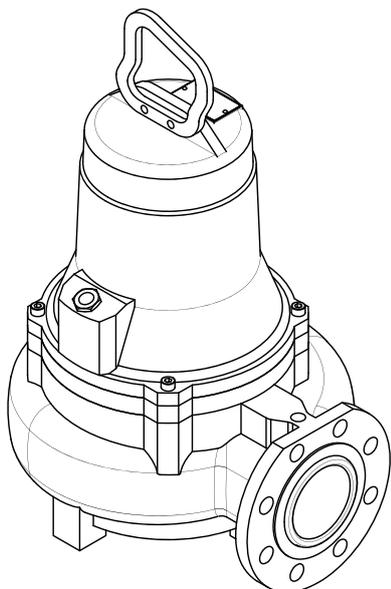
	A	B
304/402	394	235
404/412	442	285

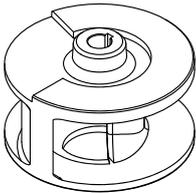


	A	B (S1)	C	D	E
304/402	98	493	610	281	440
404/412	80	528	646	328	485

## NOTES





<b>HYDROPOMPE</b>	<b>SINGLE CHANNEL IMPELLER</b>	<b>DN 150</b>
<b>F SERIES</b>		<b>50 Hz</b>
<b>704/433-1154/453-1504/463</b>		<b>4 POLE</b>

**USE**

Submersible electric pumps particularly suitable for pumping industrial sewage, screened waste water and mud in the pumping stations. They can be used also to lift clear and dirty water and rain water.

**MATERIALS**

**Motor housing**  
Cast iron EN GJL 250 (UNI EN 1561)

**Pump housing**  
Cast iron EN GJL 250 (UNI EN 1561)

**Bearing housing**  
Cast iron EN GJL 250 (UNI EN 1561)

**Impeller**  
Cast iron EN GJL 250 (UNI EN 1561)

**Mechanical seal motor side**  
Graphite/Ceramic

**Mechanical seal impeller side**  
Silicon Carbide/Ceramic

**Base frame**  
Hot-dipped galvanized steel

**Motor shaft**  
Stainless steel AISI 420

**Bolts and nuts**  
Stainless steel Grade A2

**Cable**  
10 meters type NSSHÖU-J 10G2,5mm<sup>2</sup>

**LIMITS TO USE**

**Max temperature of the liquid pumped**  
+40°C

**pH of the liquid pumped**  
6÷10

**Max immersion depth**  
20 m

**Liquid density**  
1,0 kg/dm<sup>3</sup>

**Min immersion depth for continuous service**  
635 mm

**Free passage**  
100 mm

**Max number starts/hour**  
15

**Acoustic pressure level issued**  
<70dB(A)

**MOTOR**

The electric motor is asynchronous with squirrel cage rotor in dry chamber  
Class of insulation F  
Protection degree IP68  
4pole; 50Hz

Main voltage values and relative tolerance in relation to the rated voltage value:

**THREE-PHASE**  
400V ±10%

Other voltages on request.

**OTHER FEATURES ON REQUEST**

Frequency 60 Hz (*see specific catalogue*)  
Other voltages

**SECURITY**

Thermal probes in the winding  
Conductivity probe in the oil chamber

**TECHNICAL DATA**

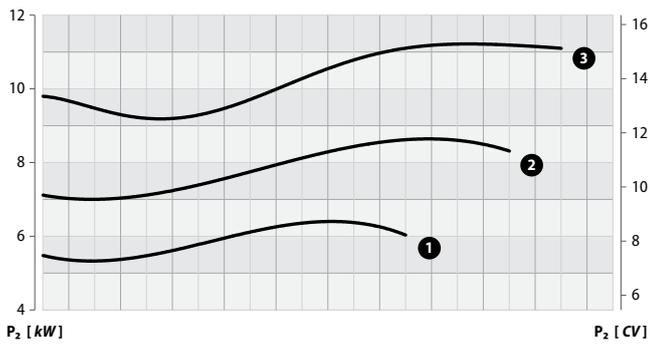
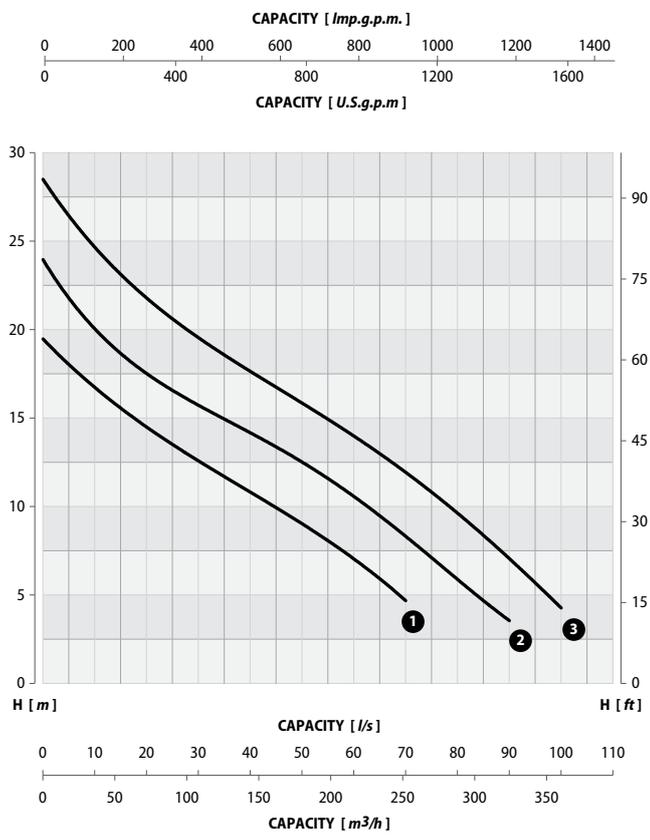
MODEL	P1 kW	P2		VOLTAGE V	CURRENT A	CABLE m	WEIGHT kg
		kW	CV				
<b>704/433</b>	8,0	6,5	8,8	400/690 (3~)	14,5	10	156
<b>1154/453</b>	10,4	8,5	11,5	400/690 (3~)	18,5	10	163
<b>1504/463</b>	13,5	11,2	15,2	400/690 (3~)	23,5	10	174

<b>F SERIES</b>	<b>704/433-1154/453-1504/463</b>		<b>DN 150</b>
			<b>50 Hz</b>
			<b>4 POLE</b>

**PERFORMANCE RANGE**

CAPACITY														
<i>l/s</i>	0	15	20	30	40	45	50	55	60	65	70	80	90	100
<i>m³/h</i>	0	54	72	108	144	162	180	198	216	234	252	288	324	360
<i>l/min</i>	0	900	1200	1800	2400	2700	3000	3300	3600	3900	4200	4800	5400	6000

MODEL	CURVE N°	HEAD <i>m</i>													
		<b>704/433</b>	1	19,5	15,5	14,5	12,5	11,0	10,0	9,0	8,0	7,0	5,8	4,8	-
<b>1154/453</b>	2	24,0	18,5	17,5	16,0	14,0	13,5	12,5	11,5	10,5	9,5	8,3	6,0	3,5	-
<b>1504/463</b>	3	28,5	23,0	22,0	19,5	17,6	16,7	15,8	15,0	14,0	13,0	12,0	9,6	7,0	4,3



Performance tolerance in according to UNI/ISO 9906 Grade 2

**F SERIES**

**704/433-1154/453-1504/463**



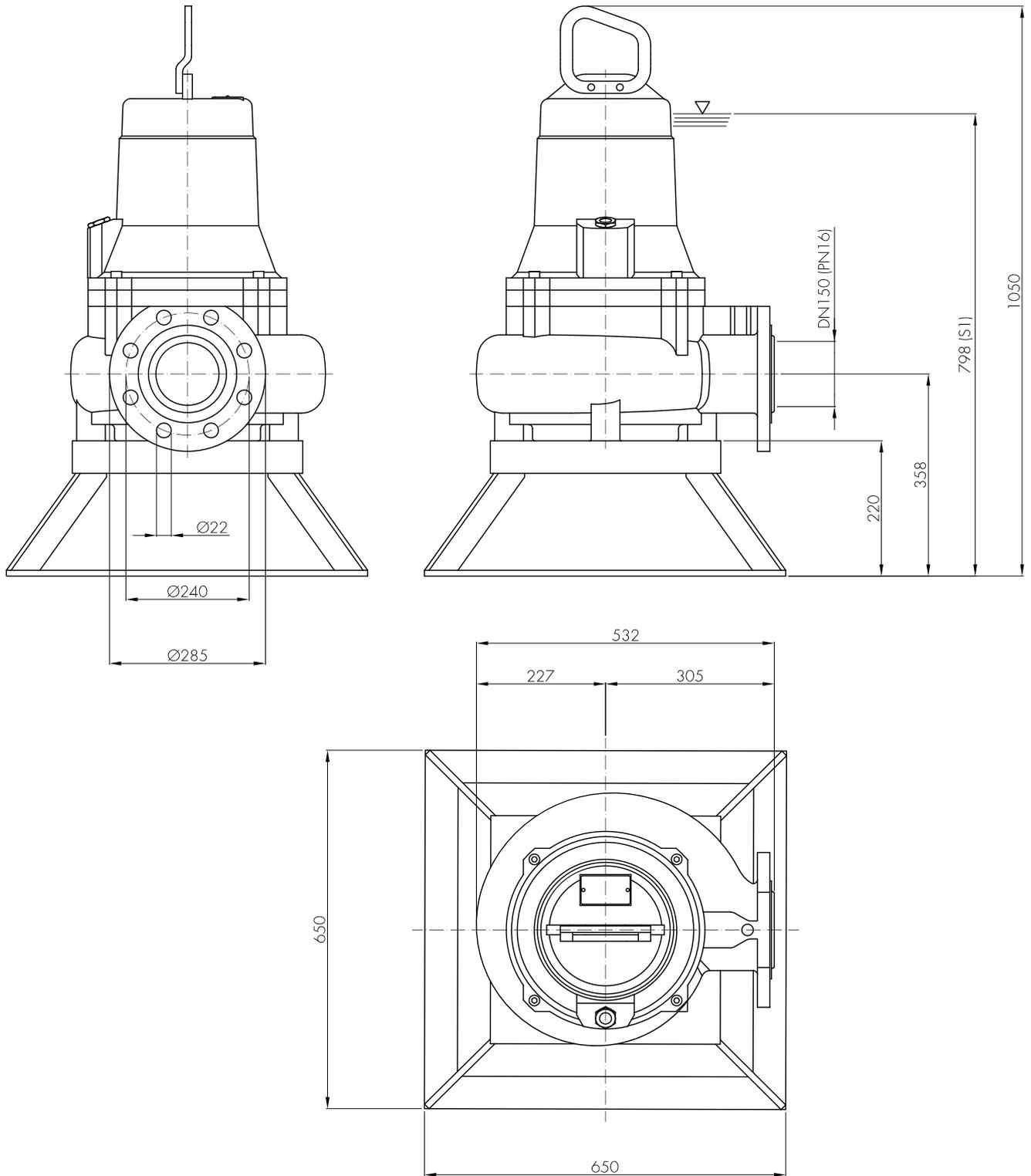
**SINGLE CHANNEL IMPELLER**

**DN 150**

**50 Hz**

**4 POLE**

**INSTALLATION DIMENSIONS**



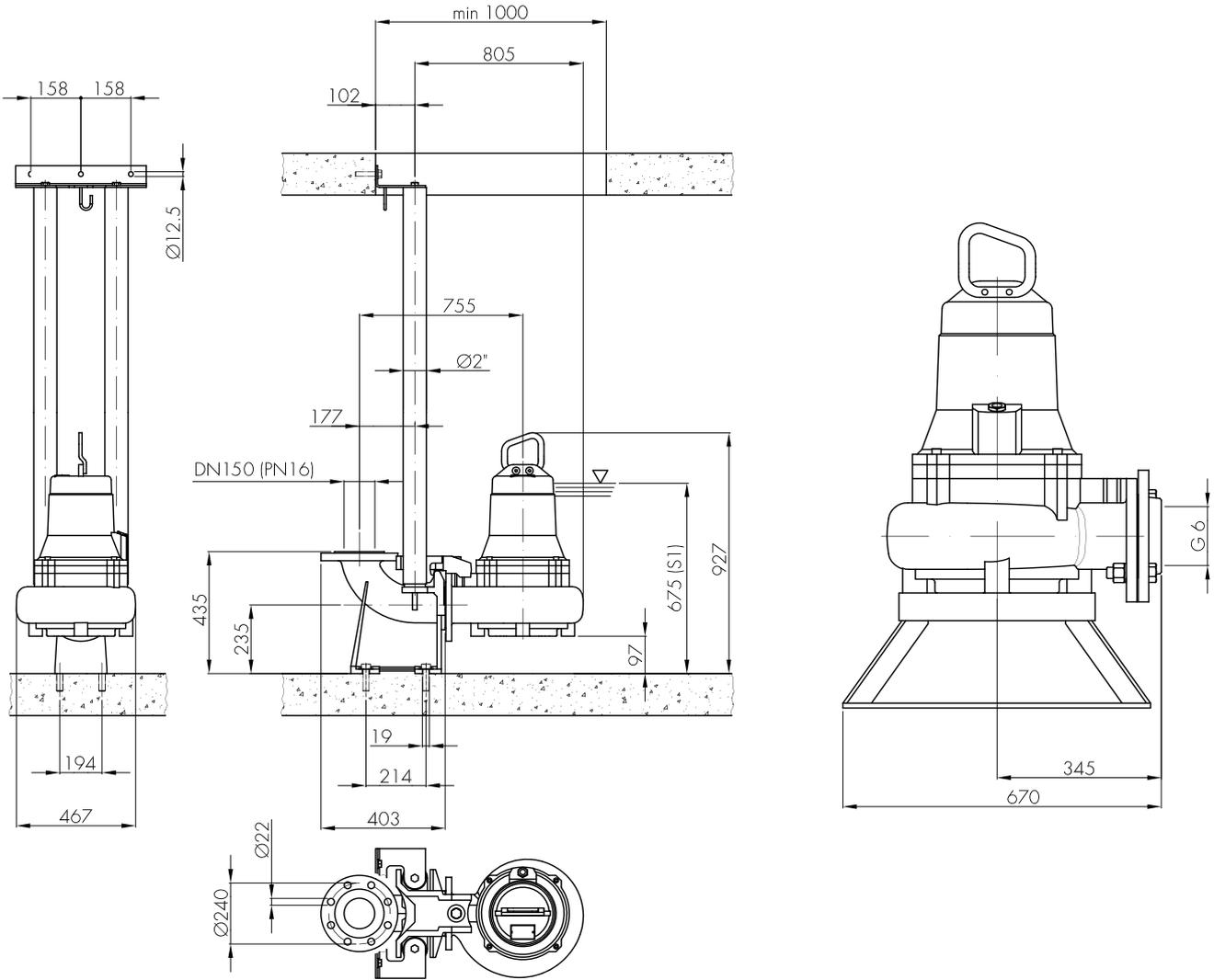
<b>F SERIES</b>	<b>704/433-1154/453-1504/463</b>		<b>DN 150</b>
			<b>50 Hz</b>
			<b>4 POLE</b>

**PERMANENT INSTALLATION WITH COUPLING SYSTEM**

It is the recommended installation for the permanent pumping station. The electric pump is guided by two pipes and it is connected automatically to the coupling system. The quick connection ensures that the pump can be easily removed and re-installed.

**PORTABLE INSTALLATION**

Transportable as emergency pump with connection to the hose and for free installation in the well.



**NOTES**

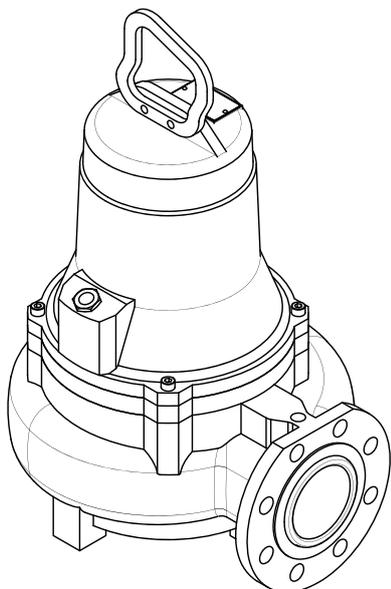


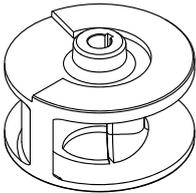
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<b>HYDROPOMPE</b>	<b>SINGLE CHANNEL IMPELLER</b>	<b>DN 150</b>
<b>F SERIES</b>		<b>50 Hz</b>
<b>704/433-1154/453-1504/463</b>		<b>4 POLE</b>

**USE**

Submersible electric pumps particularly suitable for pumping industrial sewage, screened waste water and mud in the pumping stations. They can be used also to lift clear and dirty water and rain water.

**MATERIALS**

**Motor housing**  
Cast iron EN GJL 250 (UNI EN 1561)

**Pump housing**  
Cast iron EN GJL 250 (UNI EN 1561)

**Bearing housing**  
Cast iron EN GJL 250 (UNI EN 1561)

**Impeller**  
Cast iron EN GJL 250 (UNI EN 1561)

**Mechanical seal motor side**  
Graphite/Ceramic

**Mechanical seal impeller side**  
Silicon Carbide/Ceramic

**Base frame**  
Hot-dipped galvanized steel

**Motor shaft**  
Stainless steel AISI 420

**Bolts and nuts**  
Stainless steel Grade A2

**Cable**  
10 meters type NSSHÖU-J 10G2,5mm<sup>2</sup>

**LIMITS TO USE**

**Max temperature of the liquid pumped**  
+40°C

**pH of the liquid pumped**  
6÷10

**Max immersion depth**  
20 m

**Liquid density**  
1,0 kg/dm<sup>3</sup>

**Min immersion depth for continuous service**  
635 mm

**Free passage**  
100 mm

**Max number starts/hour**  
15

**Acoustic pressure level issued**  
<70dB(A)

**MOTOR**

The electric motor is asynchronous with squirrel cage rotor in dry chamber  
Class of insulation F  
Protection degree IP68  
4pole; 50Hz

Main voltage values and relative tolerance in relation to the rated voltage value:

**THREE-PHASE**  
400V ±10%

Other voltages on request.

**OTHER FEATURES ON REQUEST**

Frequency 60 Hz (*see specific catalogue*)  
Other voltages

**SECURITY**

Thermal probes in the winding  
Conductivity probe in the oil chamber

**TECHNICAL DATA**

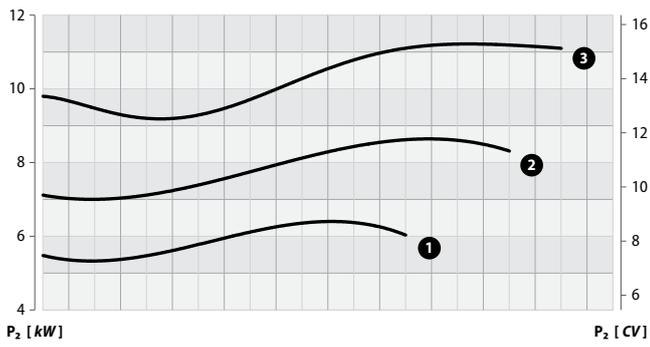
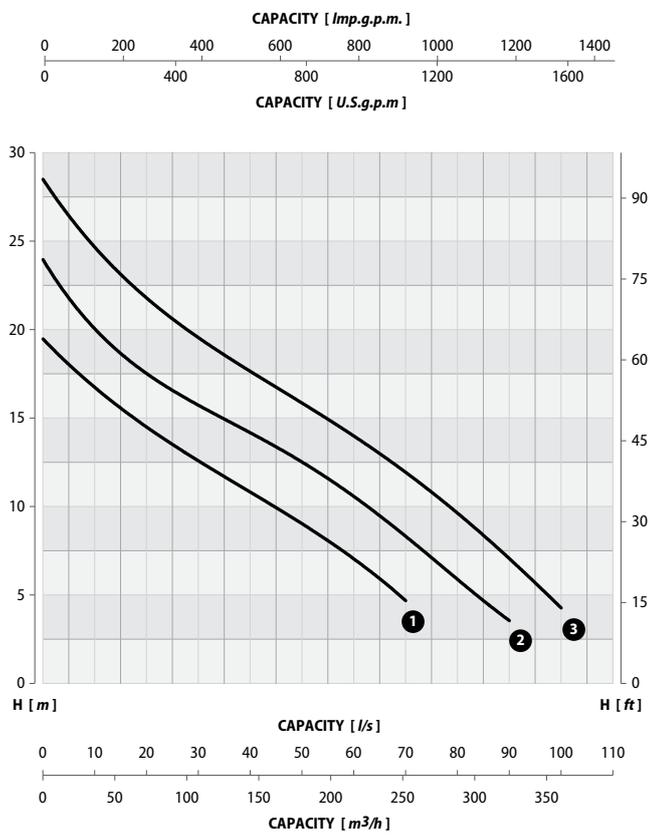
MODEL	P1 kW	P2		VOLTAGE V	CURRENT A	CABLE m	WEIGHT kg
		kW	CV				
<b>704/433</b>	8,0	6,5	8,8	400/690 (3~)	14,5	10	156
<b>1154/453</b>	10,4	8,5	11,5	400/690 (3~)	18,5	10	163
<b>1504/463</b>	13,5	11,2	15,2	400/690 (3~)	23,5	10	174

<b>F SERIES</b>	<b>704/433-1154/453-1504/463</b>		<b>DN 150</b>
			<b>50 Hz</b>
			<b>4 POLE</b>

**PERFORMANCE RANGE**

CAPACITY														
<i>l/s</i>	0	15	20	30	40	45	50	55	60	65	70	80	90	100
<i>m³/h</i>	0	54	72	108	144	162	180	198	216	234	252	288	324	360
<i>l/min</i>	0	900	1200	1800	2400	2700	3000	3300	3600	3900	4200	4800	5400	6000

MODEL	CURVE N°	HEAD <i>m</i>													
		<b>704/433</b>	1	19,5	15,5	14,5	12,5	11,0	10,0	9,0	8,0	7,0	5,8	4,8	-
<b>1154/453</b>	2	24,0	18,5	17,5	16,0	14,0	13,5	12,5	11,5	10,5	9,5	8,3	6,0	3,5	-
<b>1504/463</b>	3	28,5	23,0	22,0	19,5	17,6	16,7	15,8	15,0	14,0	13,0	12,0	9,6	7,0	4,3



Performance tolerance in according to UNI/ISO 9906 Grade 2

**F SERIES**

**704/433-1154/453-1504/463**



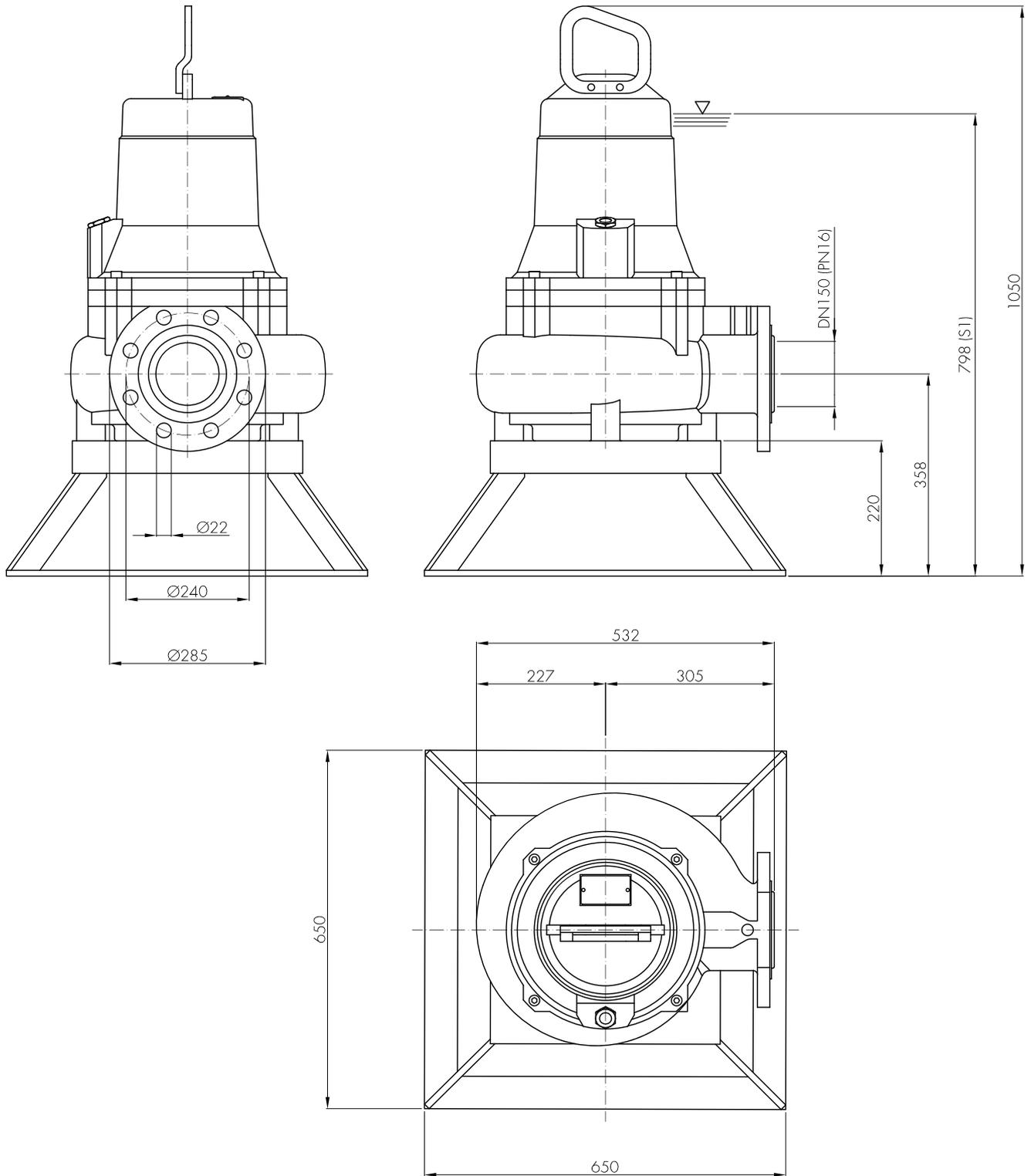
**SINGLE CHANNEL IMPELLER**

**DN 150**

**50 Hz**

**4 POLE**

**INSTALLATION DIMENSIONS**



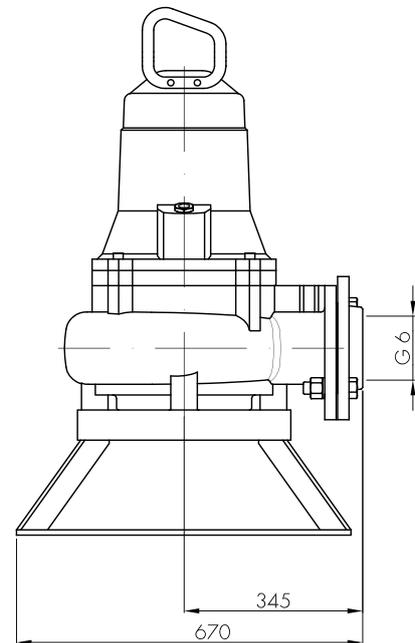
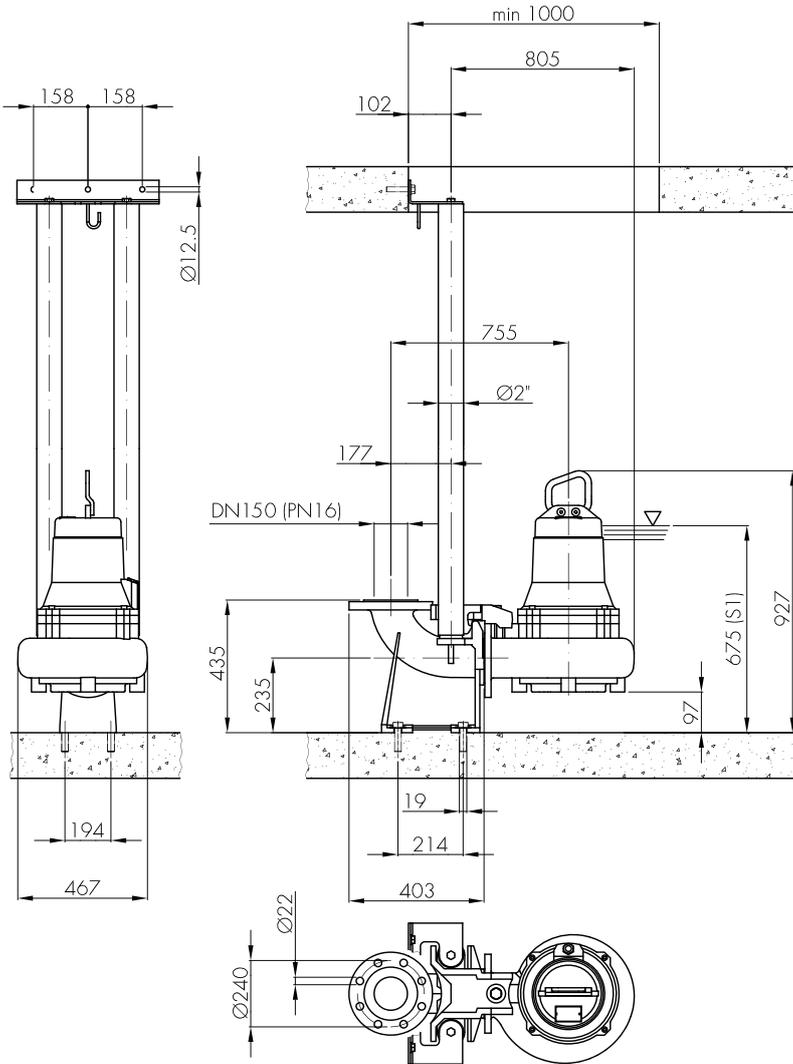
<b>F SERIES</b>	<b>704/433-1154/453-1504/463</b>		<b>DN 150</b>
			<b>50 Hz</b>
			<b>4 POLE</b>

**PERMANENT INSTALLATION WITH COUPLING SYSTEM**

It is the recommended installation for the permanent pumping station. The electric pump is guided by two pipes and it is connected automatically to the coupling system. The quick connection ensures that the pump can be easily removed and re-installed.

**PORTABLE INSTALLATION**

Transportable as emergency pump with connection to the hose and for free installation in the well.



**NOTES**

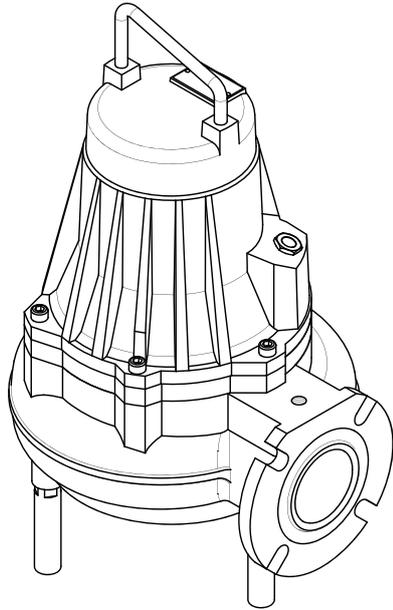


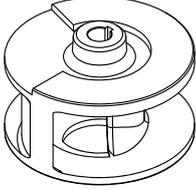
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<b>HYDROPOMPE</b>	<b>SINGLE CHANNEL IMPELLER</b>	<b>DN 80</b>
<b>F SERIES</b>		<b>50 Hz</b>
<b>304/403-404/413</b>		<b>4 POLE</b>

#### USE

Submersible electric pumps particularly suitable for pumping industrial sewage, screened waste water and mud in the pumping stations. They can be used also to lift clear and dirty water and rain water.

#### MATERIALS

##### Motor housing

Cast iron EN GJL 200 (UNI EN 1561)

##### Pump housing

Cast iron EN GJL 200 (UNI EN 1561)

##### Bearing housing

Cast iron EN GJL 200 (UNI EN 1561)

##### Impeller

Cast iron EN GJL 200 (UNI EN 1561)

##### Seal motor side

Seal ring

##### Mechanical seal impeller side

Silicon Carbide/Silicon Carbide (SiC/SiC)

##### Supporting feet

Stainless steel AISI 304

##### Motor shaft

Stainless steel AISI 420

##### Bolts and nuts

Stainless steel Grade A2

##### Cable

10.5 meters type H07RN-F 4G2,5mm<sup>2</sup>

#### LIMITS TO USE

##### Max temperature of the liquid pumped

+40°C

##### pH of the liquid pumped

6÷10

##### Max immersion depth

20 m

##### Liquid density

1,0 kg/dm<sup>3</sup>

##### Min immersion depth for continuous service

304/403 487 mm

404/413 551 mm

##### Free passage

75 mm

##### Max number starts/hour

20

##### Acoustic pressure level issued

<70dB(A)

#### MOTOR

The electric motor is asynchronous with squirrel cage rotor in dry chamber

Class of insulation F

Protection degree IP68

4pole; 50Hz

Main voltage values and relative tolerance in relation to the rated voltage value:

##### THREE-PHASE

230V ±10%

400V ±10%

Other voltages on request.

#### OTHER FEATURES ON REQUEST

Frequency 60 Hz (*see specific catalogue*)

Other voltages

With food grade white oil

#### TECHNICAL DATA

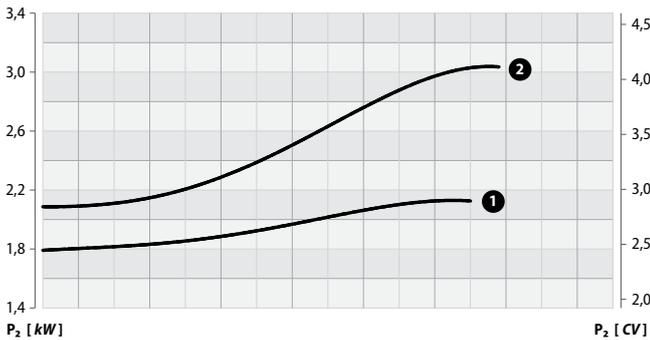
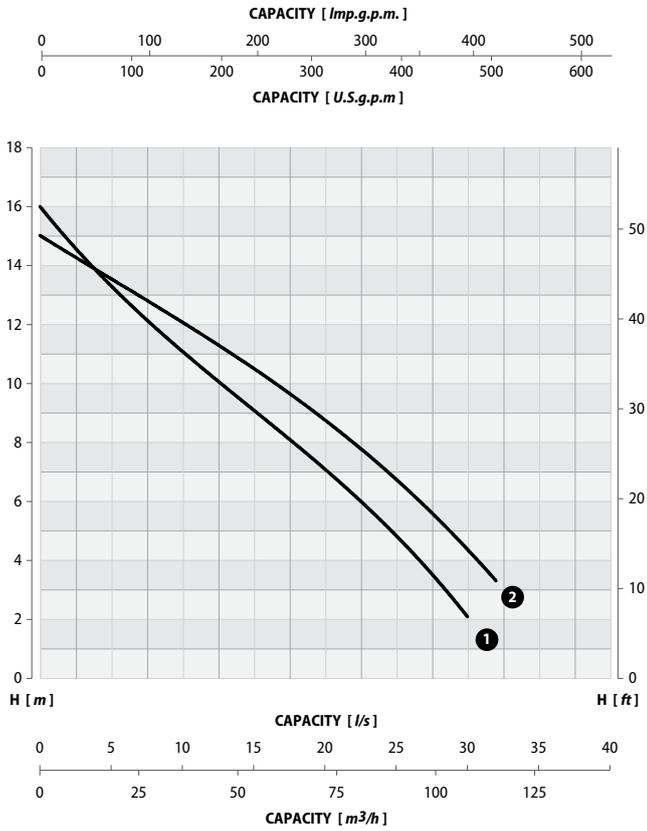
MODEL	P1 kW	P2		VOLTAGE V	CURRENT A	CABLE m	WEIGHT kg
		kW	CV				
<b>304/403</b>	3,8	2,2	3,0	230/400 (3~)	11,2/6,5	10	73
<b>404/413</b>	5,0	3,1	4,2	230/400 (3~)	14,7/8,5	10	86

<b>F SERIES</b>	<b>304/403-404/413</b>		<b>DN 80</b>
			<b>50 Hz</b>
			<b>4 POLE</b>

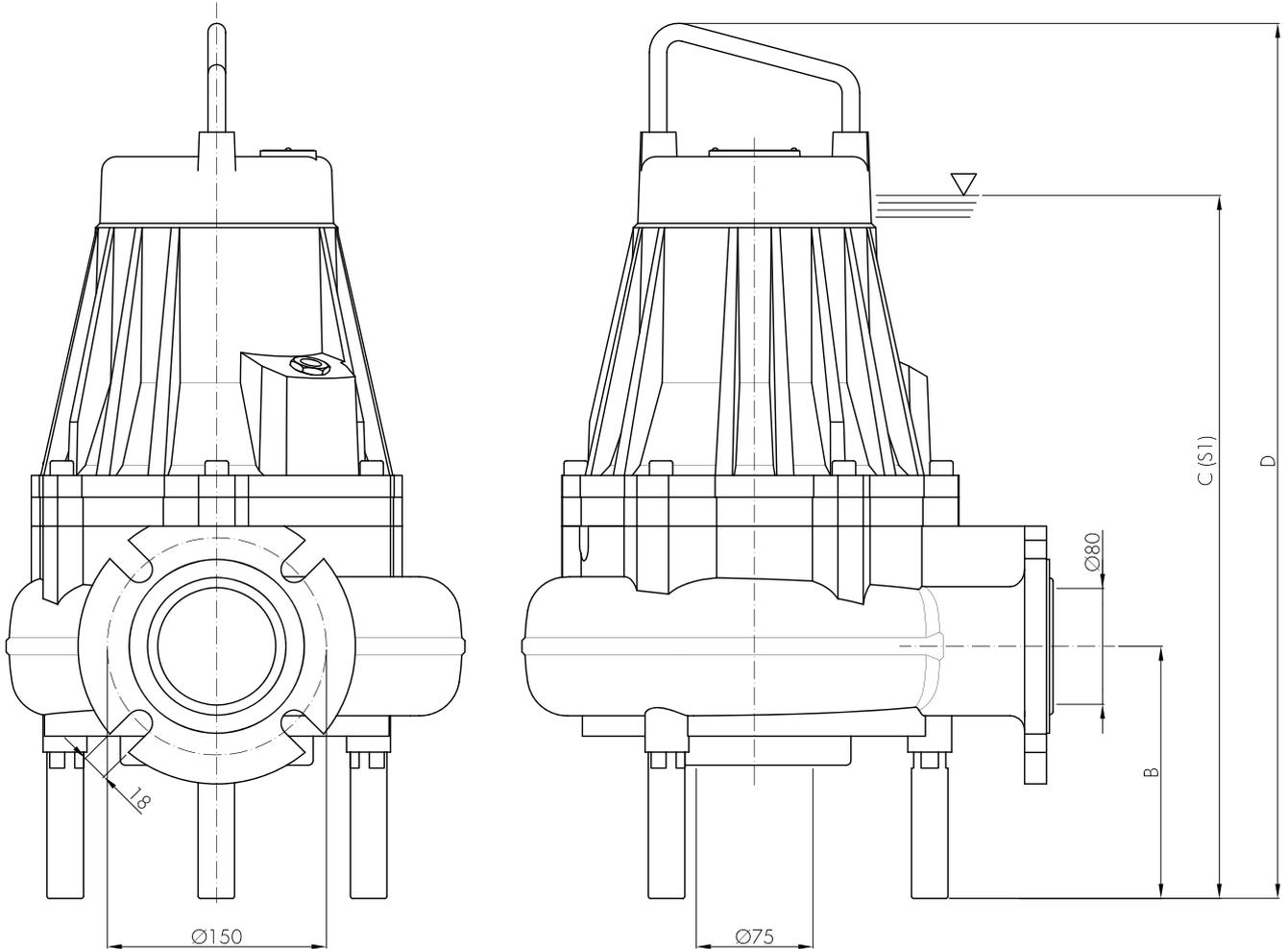
**PERFORMANCE RANGE**

CAPACITY														
<i>l/s</i>	0	8	10	12	14	16	18	20	22	24	26	28	30	32
<i>m³/h</i>	0	28,8	36,0	43,2	50,4	57,6	64,8	72,0	79,2	86,4	93,6	100,8	108,0	115,2
<i>l/min</i>	0	480	600	720	840	960	1080	1200	1320	1440	1560	1680	1800	1920

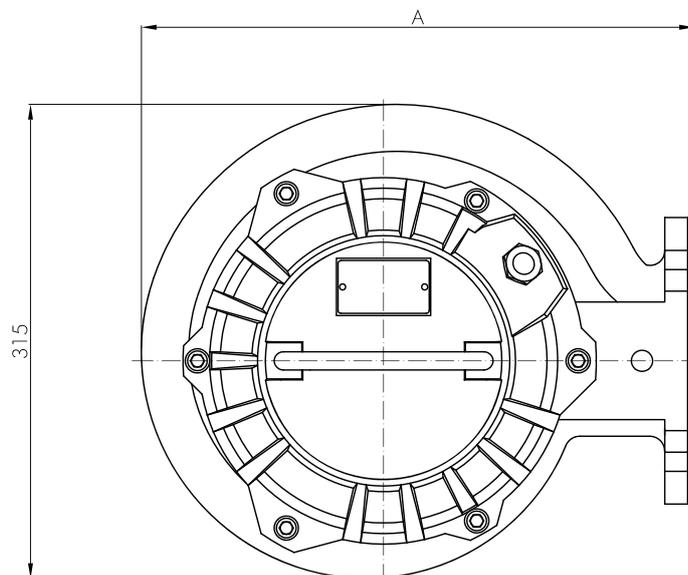
MODEL	CURVE N°	HEAD <i>m</i>													
		<b>304/403</b>	1	16,0	12,0	11,0	10,4	9,5	8,5	8,0	7,2	6,1	5,5	4,1	3,5
<b>404/413</b>	2	15,0	13,0	12,0	11,0	10,8	10,4	9,5	8,9	8,0	7,4	6,0	5,5	4,1	3,5



Performance tolerance in according to UNI/ISO 9906 Grade 2

**F SERIES****304/403-404/413****SINGLE CHANNEL IMPELLER****DN 80****50 Hz****4 POLE****INSTALLATION DIMENSIONS**

	A	B	C (S1)	D
304/403	364	174	487	604
404/413	412	202	551	668



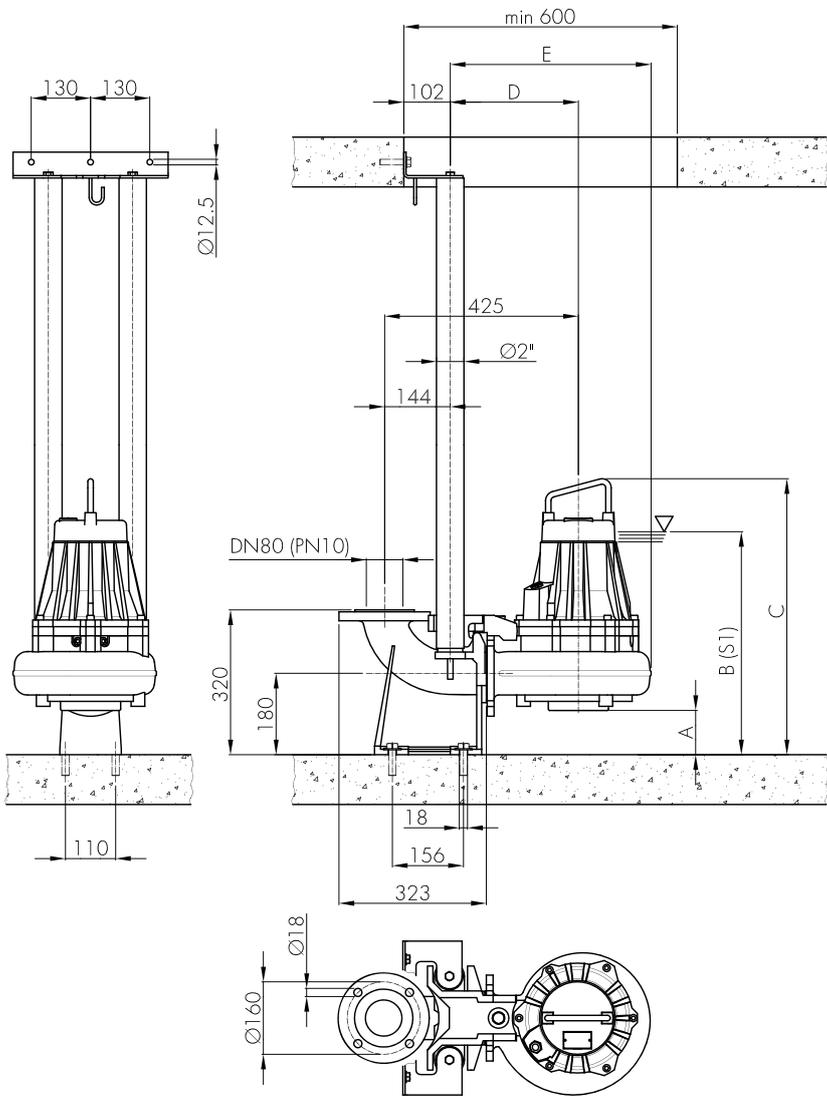
<b>F SERIES</b>	<b>304/403-404/413</b>		<b>DN 80</b>
			<b>50 Hz</b>
			<b>4 POLE</b>

**PERMANENT INSTALLATION WITH COUPLING SYSTEM**

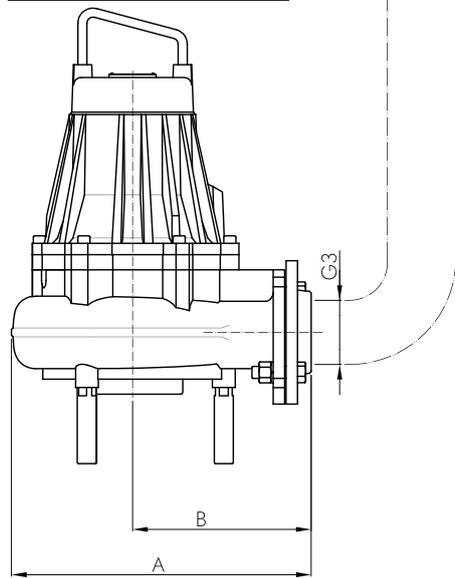
It is the recommended installation for the permanent pumping station. The electric pump is guided by two pipes and it is connected automatically to the coupling system. The quick connection ensures that the pump can be easily removed and re-installed.

**PORTABLE INSTALLATION**

Transportable as emergency pump with connection to the hose and for free installation in the well.



	A	B
304/402	394	235
404/412	442	285



	A	B (S1)	C	D	E
304/403	98	493	610	281	440
404/413	80	528	646	328	485

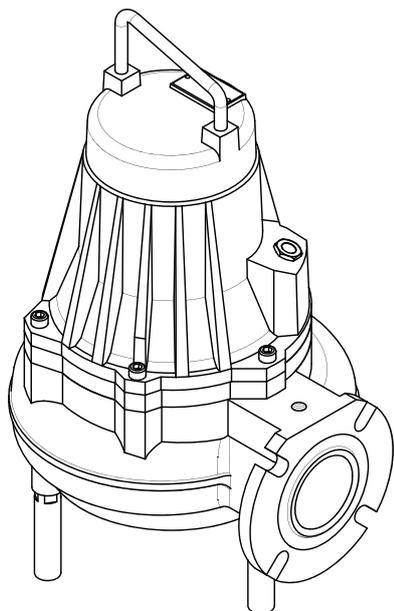
**NOTES**

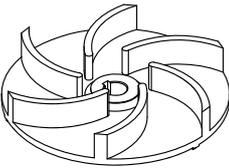


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<b>HYDROPOMPE</b>	<b>VORTEX IMPELLER</b>	<b>DN 80</b>
<b>F SERIES</b>		<b>50 Hz</b>
<b>304/402-404/412</b>		<b>4 POLE</b>

**USE**

Submersible electric pumps particularly suitable for pumping industrial sewage, screened waste water and mud in the pumping stations. They can be used also to lift clear and dirty water and rain water.

**MATERIALS**

- Motor housing**  
Cast iron EN GJL 200 (UNI EN 1561)
- Pump housing**  
Cast iron EN GJL 200 (UNI EN 1561)
- Bearing housing**  
Cast iron EN GJL 200 (UNI EN 1561)
- Impeller**  
Cast iron EN GJL 200 (UNI EN 1561)
- Seal motor side**  
Seal ring
- Mechanical seal impeller side**  
Silicon Carbide/Silicon Carbide (SiC/SiC)
- Supporting feet**  
Stainless steel AISI 304
- Motor shaft**  
Stainless steel AISI 420
- Bolts and nuts**  
Stainless steel Grade A2
- Cable**  
10.5 meters type H07RN-F 4G2,5mm<sup>2</sup>

**LIMITS TO USE**

- Max temperature of the liquid pumped**  
+40°C
- pH of the liquid pumped**  
6÷10
- Max immersion depth**  
20 m
- Liquid density**  
1,0 kg/dm<sup>3</sup>
- Min immersion depth for continuous service**  
304/402 487 mm  
404/412 551 mm
- Free passage**  
75 mm
- Max number starts/hour**  
20
- Acoustic pressure level issued**  
<70dB(A)

**MOTOR**

The electric motor is asynchronous with squirrel cage rotor in dry chamber  
Class of insulation F  
Protection degree IP68  
4pole; 50Hz

Main voltage values and relative tolerance in relation to the rated voltage value:

**THREE-PHASE**  
230V ±10%  
400V ±10%

Other voltages on request.

**OTHER FEATURES ON REQUEST**

Frequency 60 Hz (*see specific catalogue*)  
Other voltages  
With food grade white oil

**TECHNICAL DATA**

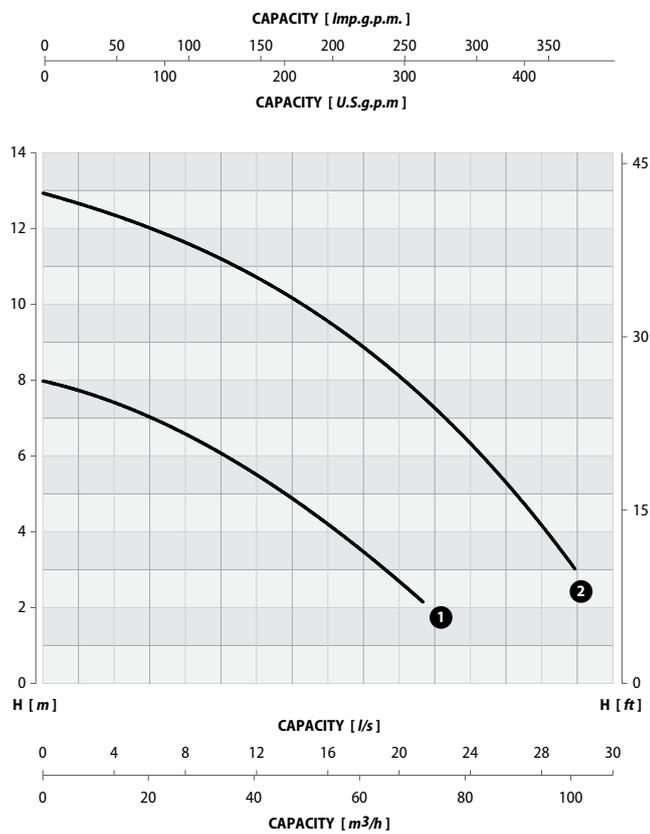
MODEL	P1		P2		VOLTAGE V	CURRENT A	CABLE m	WEIGHT kg
	kW	kW	kW	CV				
<b>304/402</b>	3,8	2,2	3,0		230/400 (3~)	11,2/6,5	10	73
<b>404/412</b>	5,0	3,1	4,2		230/400 (3~)	14,7/8,5	10	86

<b>F SERIES</b>	<b>304/402-404/412</b>		<b>VORTEX IMPELLER</b>	<b>DN 80</b>
				<b>50 Hz</b>
				<b>4 POLE</b>

**PERFORMANCE RANGE**

CAPACITY												
<i>l/s</i>	0	4	8	12	14	16	18	20	22	24	26	28
<i>m³/h</i>	0	14,4	28,8	43,2	50,4	57,6	64,8	72,0	79,2	86,4	93,6	100,8
<i>l/min</i>	0	240	480	720	840	960	1080	1200	1320	1440	1560	1680

MODEL	CURVE <i>N°</i>	HEAD <i>m</i>											
		<b>304/402</b>	1	8,0	7,3	6,5	5,3	4,5	3,9	2,9	2,2	-	-
<b>404/412</b>	2	13,0	12,2	11,5	10,5	10,0	9,2	8,4	7,7	6,5	5,5	4,1	3,2



Performance tolerance in according to UNI/ISO 9906 Grade 2

**F SERIES**

**304/402-404/412**



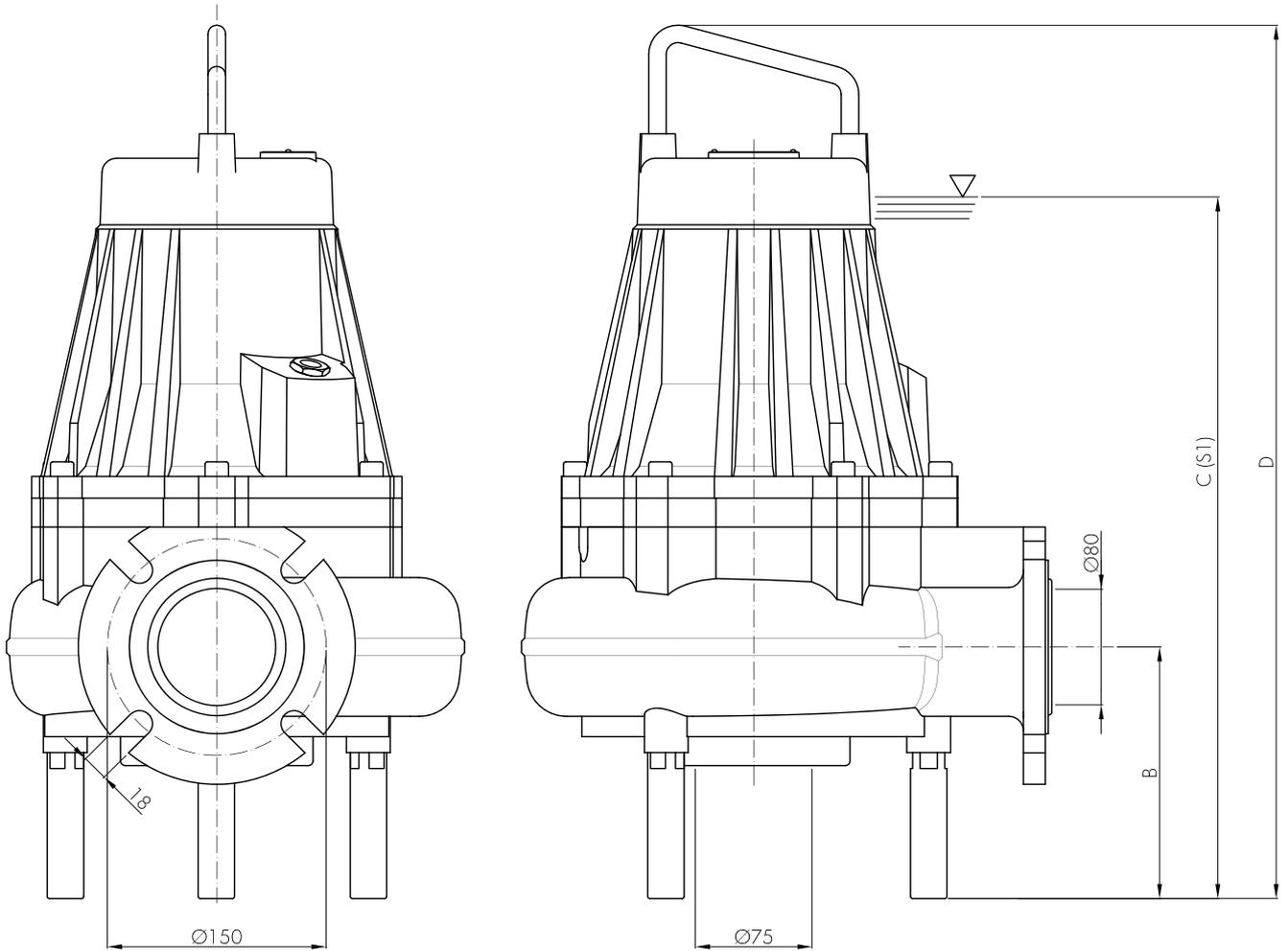
**VORTEX IMPELLER**

**DN 80**

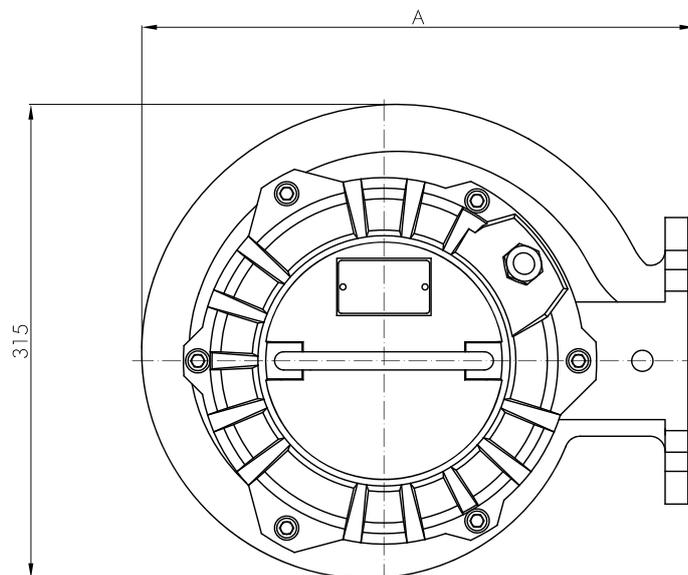
**50 Hz**

**4 POLE**

**INSTALLATION DIMENSIONS**



	A	B	C (S1)	D
304/402	364	174	487	604
404/412	412	202	551	668



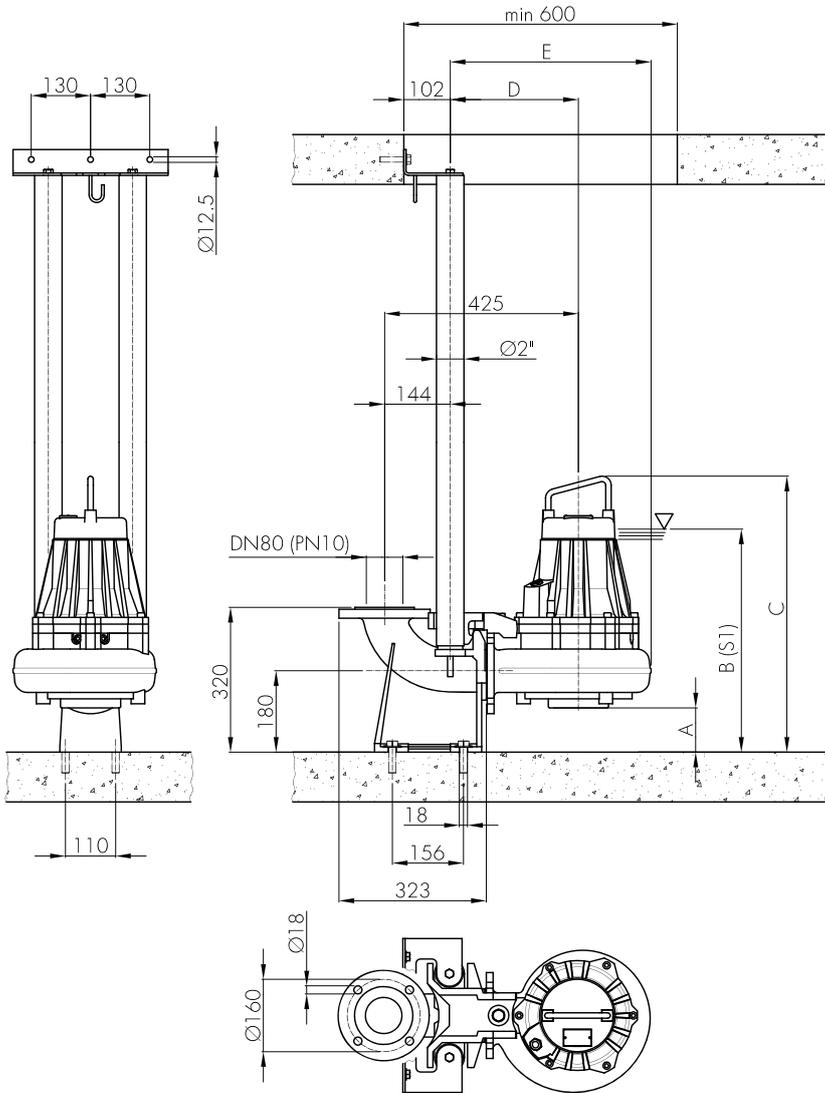
<b>F SERIES</b>	<b>304/402-404/412</b>		<b>VORTEX IMPELLER</b>	<b>DN 80</b>
				<b>50 Hz</b>
				<b>4 POLE</b>

**PERMANENT INSTALLATION WITH COUPLING SYSTEM**

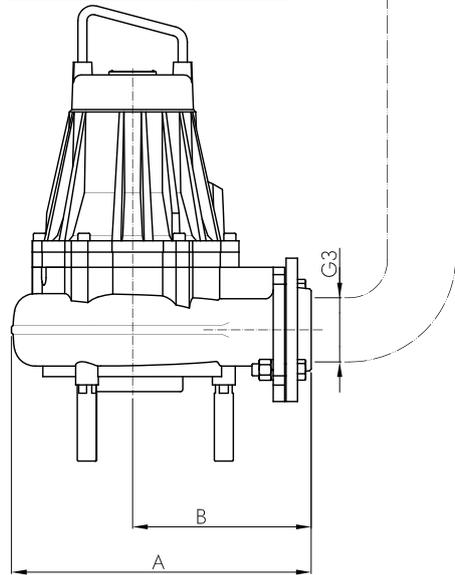
It is the recommended installation for the permanent pumping station. The electric pump is guided by two pipes and it is connected automatically to the coupling system. The quick connection ensures that the pump can be easily removed and re-installed.

**PORTABLE INSTALLATION**

Transportable as emergency pump with connection to the hose and for free installation in the well.



	A	B
304/402	394	235
404/412	442	285



	A	B (S1)	C	D	E
304/402	98	493	610	281	440
404/412	80	528	646	328	485

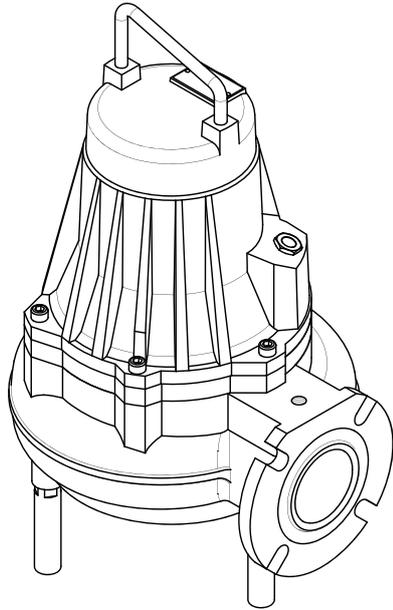
**NOTES**

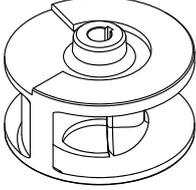


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<b>HYDROPOMPE</b>	<b>SINGLE CHANNEL IMPELLER</b>	<b>DN 80</b>
<b>F SERIES</b>		<b>50 Hz</b>
<b>304/403-404/413</b>		<b>4 POLE</b>

#### USE

Submersible electric pumps particularly suitable for pumping industrial sewage, screened waste water and mud in the pumping stations. They can be used also to lift clear and dirty water and rain water.

#### MATERIALS

##### Motor housing

Cast iron EN GJL 200 (UNI EN 1561)

##### Pump housing

Cast iron EN GJL 200 (UNI EN 1561)

##### Bearing housing

Cast iron EN GJL 200 (UNI EN 1561)

##### Impeller

Cast iron EN GJL 200 (UNI EN 1561)

##### Seal motor side

Seal ring

##### Mechanical seal impeller side

Silicon Carbide/Silicon Carbide (SiC/SiC)

##### Supporting feet

Stainless steel AISI 304

##### Motor shaft

Stainless steel AISI 420

##### Bolts and nuts

Stainless steel Grade A2

##### Cable

10.5 meters type H07RN-F 4G2,5mm<sup>2</sup>

#### LIMITS TO USE

##### Max temperature of the liquid pumped

+40°C

##### pH of the liquid pumped

6÷10

##### Max immersion depth

20 m

##### Liquid density

1,0 kg/dm<sup>3</sup>

##### Min immersion depth for continuous service

304/403 487 mm

404/413 551 mm

##### Free passage

75 mm

##### Max number starts/hour

20

##### Acoustic pressure level issued

<70dB(A)

#### MOTOR

The electric motor is asynchronous with squirrel cage rotor in dry chamber

Class of insulation F

Protection degree IP68

4pole; 50Hz

Main voltage values and relative tolerance in relation to the rated voltage value:

##### THREE-PHASE

230V ±10%

400V ±10%

Other voltages on request.

#### OTHER FEATURES ON REQUEST

Frequency 60 Hz (*see specific catalogue*)

Other voltages

With food grade white oil

#### TECHNICAL DATA

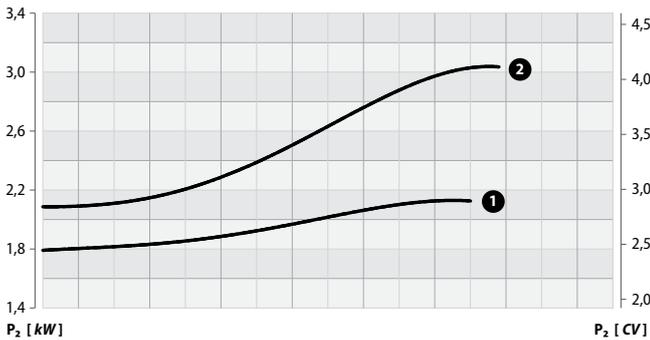
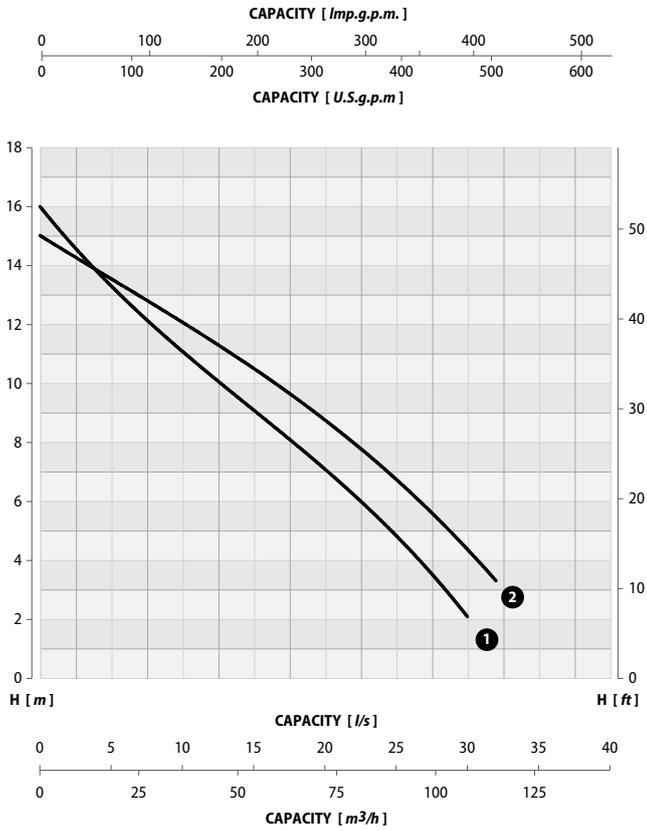
MODEL	P1 kW	P2		VOLTAGE V	CURRENT A	CABLE m	WEIGHT kg
		kW	CV				
<b>304/403</b>	3,8	2,2	3,0	230/400 (3~)	11,2/6,5	10	73
<b>404/413</b>	5,0	3,1	4,2	230/400 (3~)	14,7/8,5	10	86

<b>F SERIES</b>	<b>304/403-404/413</b>		<b>DN 80</b>
			<b>50 Hz</b>
			<b>4 POLE</b>

**PERFORMANCE RANGE**

CAPACITY														
<i>l/s</i>	0	8	10	12	14	16	18	20	22	24	26	28	30	32
<i>m³/h</i>	0	28,8	36,0	43,2	50,4	57,6	64,8	72,0	79,2	86,4	93,6	100,8	108,0	115,2
<i>l/min</i>	0	480	600	720	840	960	1080	1200	1320	1440	1560	1680	1800	1920

MODEL	CURVE N°	HEAD <i>m</i>													
		<b>304/403</b>	1	16,0	12,0	11,0	10,4	9,5	8,5	8,0	7,2	6,1	5,5	4,1	3,5
<b>404/413</b>	2	15,0	13,0	12,0	11,0	10,8	10,4	9,5	8,9	8,0	7,4	6,0	5,5	4,1	3,5



Performance tolerance in according to UNI/ISO 9906 Grade 2

**F SERIES**

**304/403-404/413**



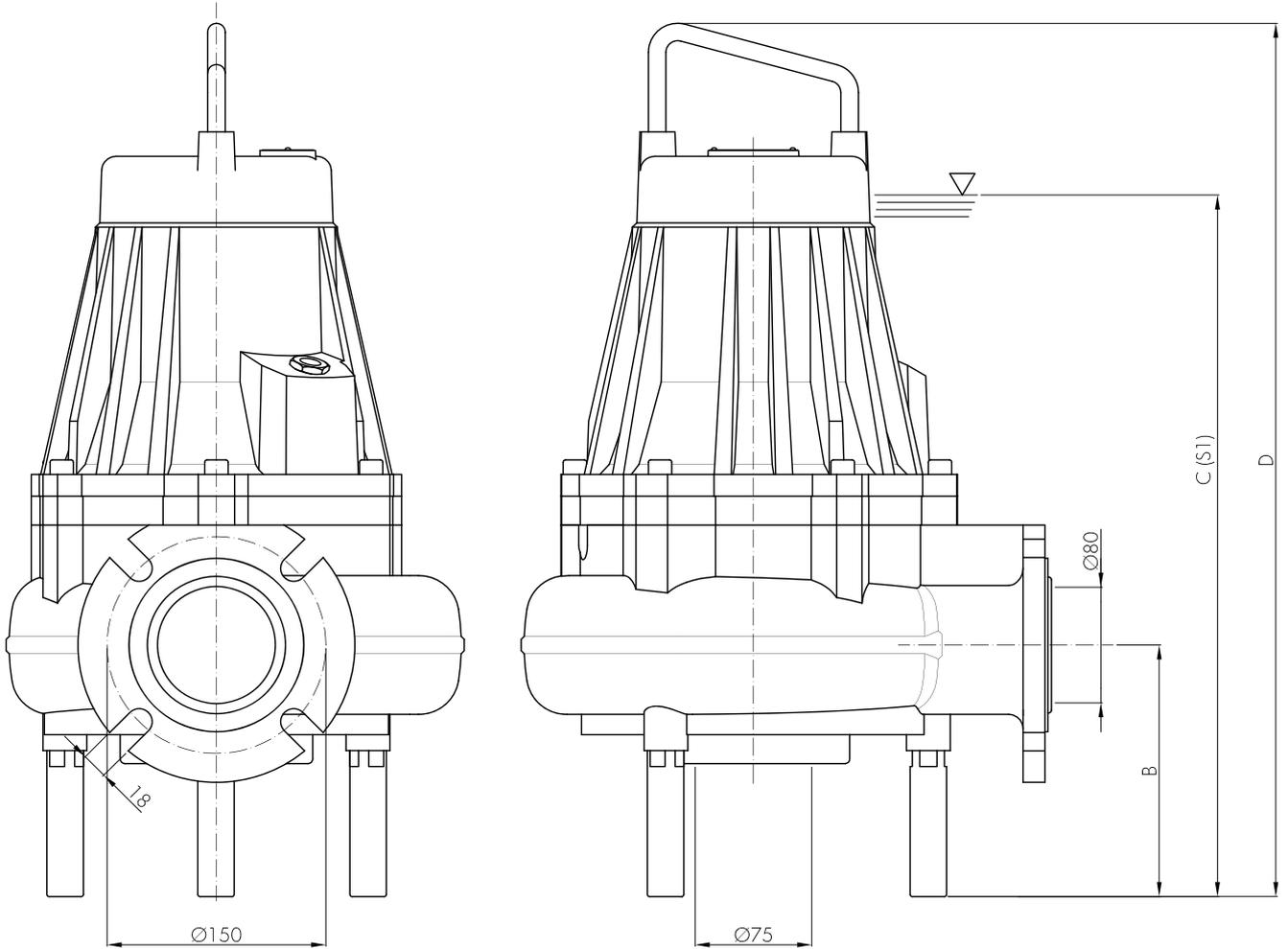
**SINGLE CHANNEL IMPELLER**

**DN 80**

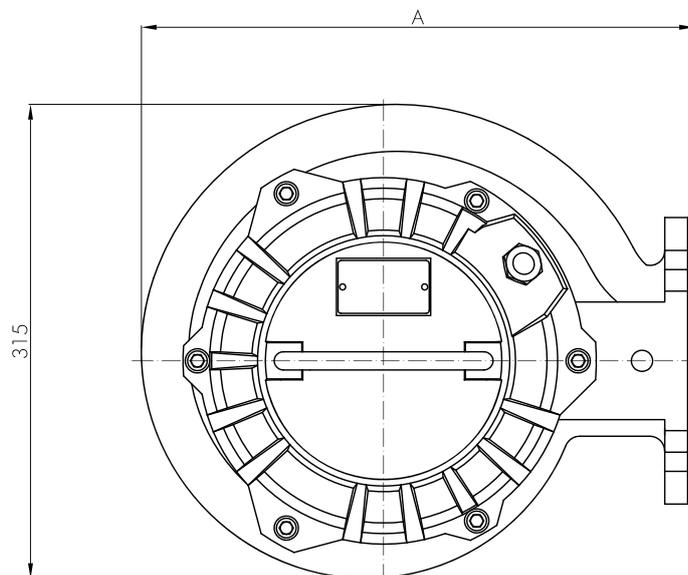
**50 Hz**

**4 POLE**

**INSTALLATION DIMENSIONS**



	A	B	C (S1)	D
304/403	364	174	487	604
404/413	412	202	551	668



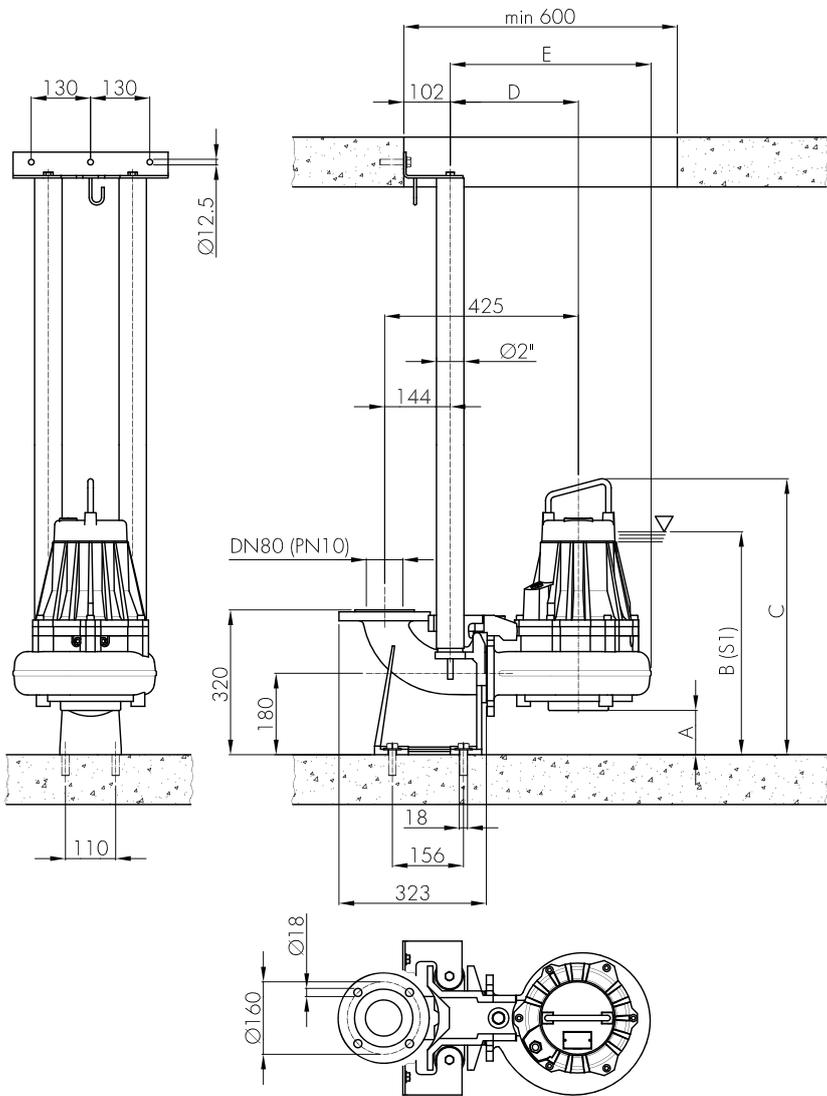
<b>F SERIES</b>	<b>304/403-404/413</b>		<b>DN 80</b>
			<b>50 Hz</b>
			<b>4 POLE</b>

**PERMANENT INSTALLATION WITH COUPLING SYSTEM**

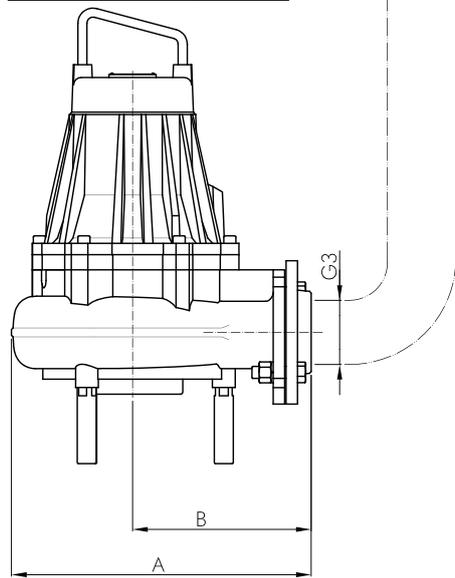
It is the recommended installation for the permanent pumping station. The electric pump is guided by two pipes and it is connected automatically to the coupling system. The quick connection ensures that the pump can be easily removed and re-installed.

**PORTABLE INSTALLATION**

Transportable as emergency pump with connection to the hose and for free installation in the well.



	A	B
304/402	394	235
404/412	442	285



	A	B (S1)	C	D	E
304/403	98	493	610	281	440
404/413	80	528	646	328	485

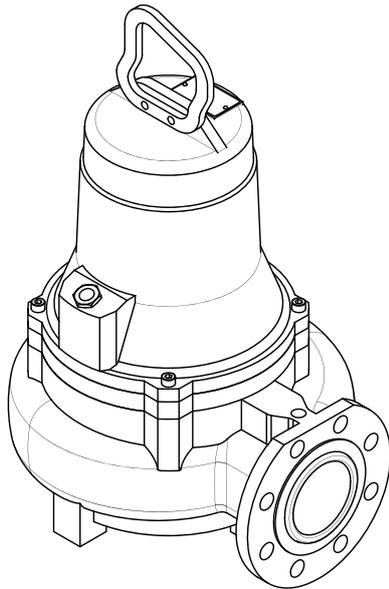
**NOTES**

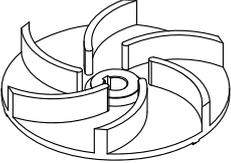


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<b>HYDROPOMPE</b>	<b>VORTEX IMPELLER</b>	<b>DN 80</b>
<b>F SERIES</b>		<b>50 Hz</b>
<b>504/420</b>		<b>4 POLE</b>

#### USE

Submersible electric pumps particularly suitable for pumping industrial sewage, screened waste water and mud in the pumping stations. They can be used also to lift clear and dirty water and rain water.

#### MATERIALS

##### Motor housing

Cast iron EN GJL 250 (UNI EN 1561)

##### Pump housing

Cast iron EN GJL 250 (UNI EN 1561)

##### Bearing housing

Cast iron EN GJL 250 (UNI EN 1561)

##### Impeller

Cast iron EN GJL 250 (UNI EN 1561)

##### Mechanical seal motor side

Graphite/Ceramic

##### Mechanical seal impeller side

Silicon Carbide/Ceramic

##### Base frame

Hot-dipped galvanized steel

##### Motor shaft

Stainless steel AISI 420

##### Bolts and nuts

Stainless steel Grade A2

##### Cable

10 meters type NSSHÖU-J 7G1,5mm<sup>2</sup>

#### LIMITS TO USE

##### Max temperature of the liquid pumped

+40°C

##### pH of the liquid pumped

6÷10

##### Max immersion depth

20 m

##### Liquid density

1,0 kg/dm<sup>3</sup>

##### Min immersion depth for continuous service

607 mm

##### Free passage

80 mm

##### Max number starts/hour

20

##### Acoustic pressure level issued

<70dB(A)

#### MOTOR

The electric motor is asynchronous with squirrel cage rotor in dry chamber

Class of insulation F

Protection degree IP68

4pole; 50Hz

Main voltage values and relative tolerance in relation to the rated voltage value:

##### THREE-PHASE

400V ±10%

Other voltages on request.

#### OTHER FEATURES ON REQUEST

Frequency 60 Hz (*see specific catalogue*)

Other voltages

#### SECURITY

Thermal probes in the winding

Conductivity probe in the oil chamber

#### TECHNICAL DATA

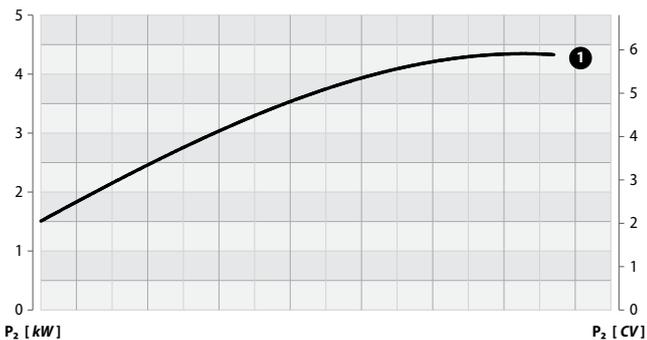
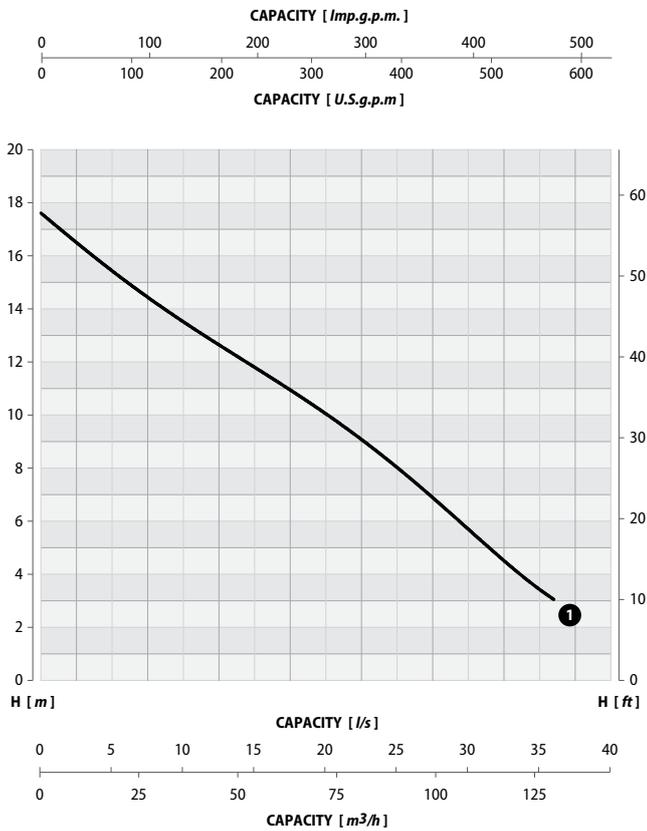
MODEL	P1	P2		VOLTAGE V	CURRENT A	CABLE m	WEIGHT kg
	kW	kW	CV				
<b>504/420</b>	6,8	5,1	6,9	400 (3~)	11,5	10	79

<b>F SERIES</b>	<b>504/420</b>		<b>VORTEX IMPELLER</b>	<b>DN 80</b>
				<b>50 Hz</b>
				<b>4 POLE</b>

**PERFORMANCE RANGE**

		<b>CAPACITY</b>															
<i>l/s</i>	0	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	
<i>m³/h</i>	0	28,8	36,0	43,2	50,4	57,6	64,8	72,0	79,2	86,4	93,6	101,0	108,0	115,2	122,4	129,6	
<i>l/min</i>	0	480	600	720	840	960	1080	1200	1320	1440	1560	1680	1800	1920	2040	2160	

<b>MODEL</b>	<b>CURVE N°</b>	<b>HEAD</b>															
		<i>m</i>															
<b>504/420</b>	<b>1</b>	17,6	14,4	13,5	12,5	12,2	11,5	10,9	10,1	9,3	8,4	7,5	6,6	5,7	4,8	3,9	3,0



Performance tolerance in according to UNI/ISO 9906 Grade 2

F SERIES

504/420



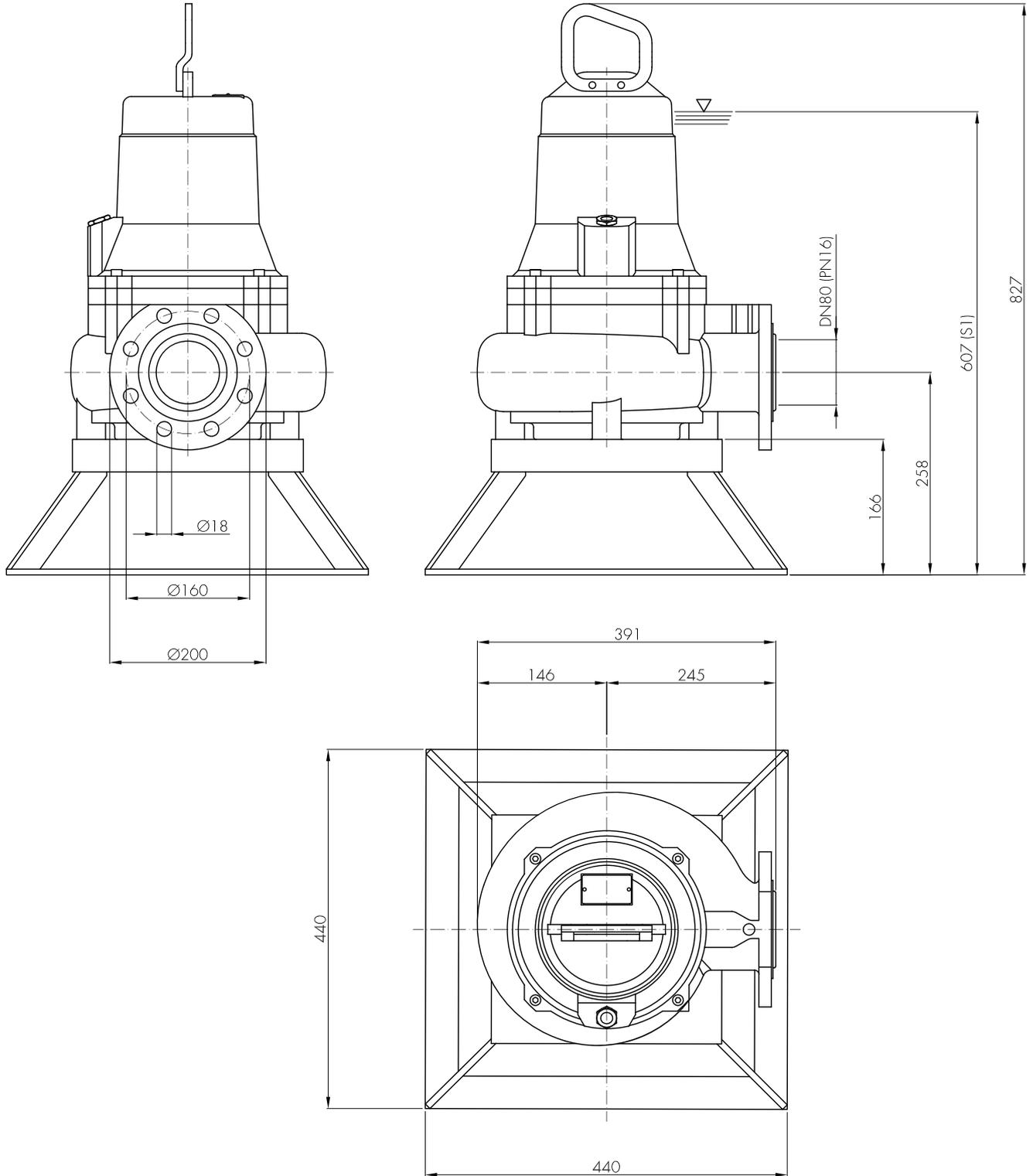
VORTEX IMPELLER

DN 80

50 Hz

4 POLE

INSTALLATION DIMENSIONS



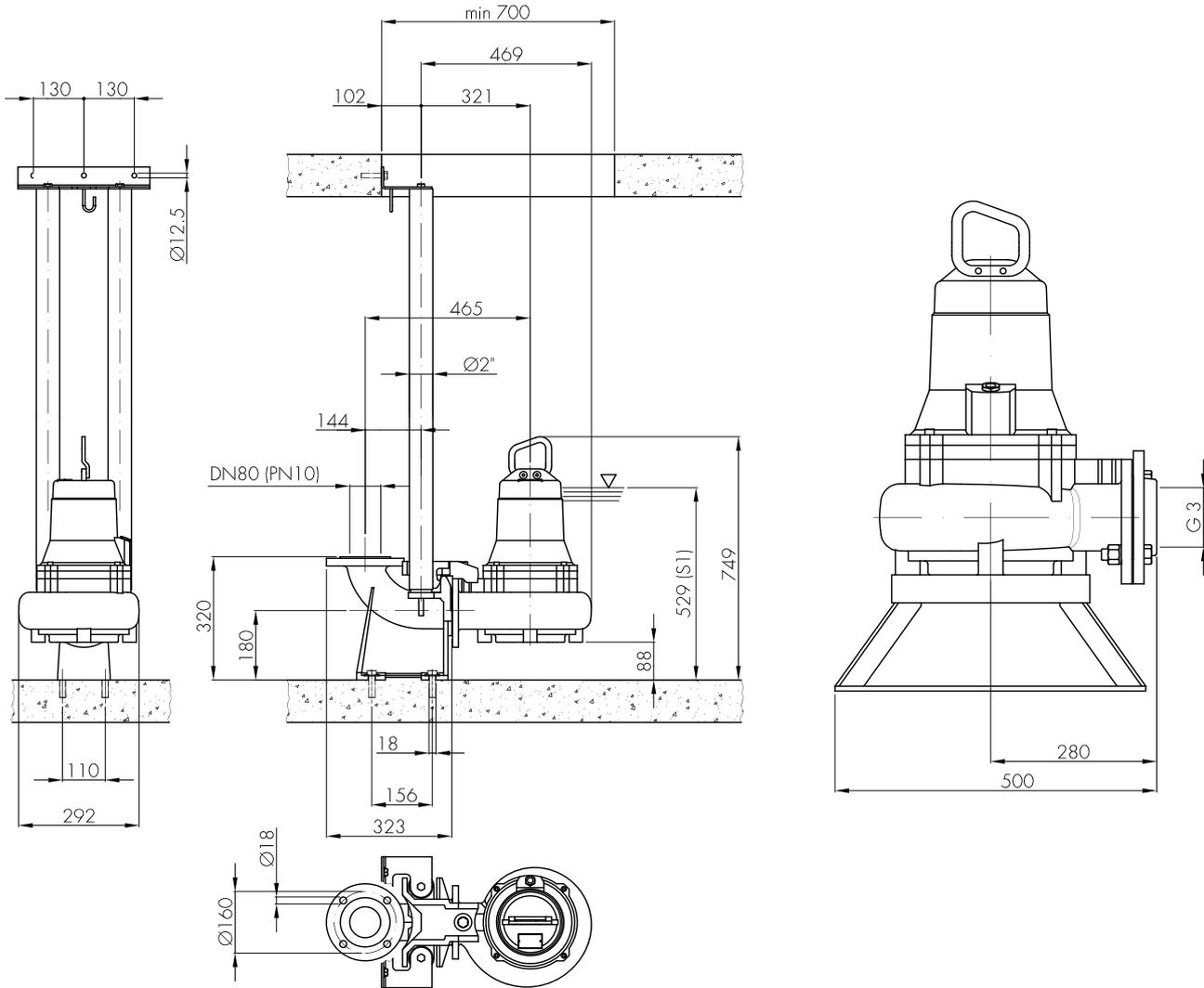
<b>F SERIES</b>	<b>504/420</b>	 <b>VORTEX IMPELLER</b>	<b>DN 80</b>
			<b>50 Hz</b>
			<b>4 POLE</b>

**PERMANENT INSTALLATION WITH COUPLING SYSTEM**

**PORTABLE INSTALLATION**

It is the recommended installation for the permanent pumping station. The electric pump is guided by two pipes and it is connected automatically to the coupling system. The quick connection ensures that the pump can be easily removed and re-installed.

Transportable as emergency pump with connection to the hose and for free installation in the well.



**NOTES**

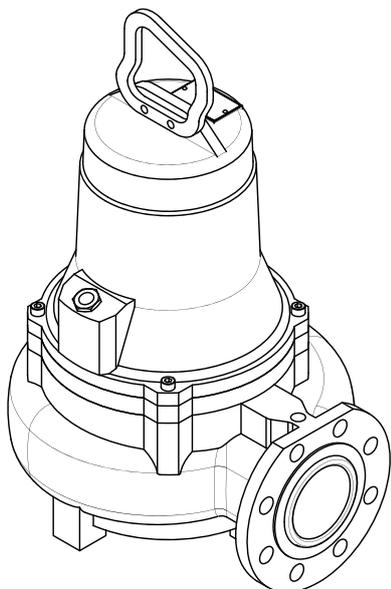


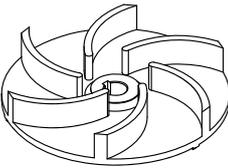
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<b>HYDROPOMPE</b>	<b>VORTEX IMPELLER</b>	<b>DN 100</b>
<b>F SERIES</b>		<b>50 Hz</b>
<b>504/422-704/432-904/442</b>		<b>4 POLE</b>

**USE**

Submersible electric pumps particularly suitable for pumping industrial sewage, screened waste water and mud in the pumping stations. They can be used also to lift clear and dirty water and rain water.

**MATERIALS**

**Motor housing**  
Cast iron EN GJL 250 (UNI EN 1561)

**Pump housing**  
Cast iron EN GJL 250 (UNI EN 1561)

**Bearing housing**  
Cast iron EN GJL 250 (UNI EN 1561)

**Impeller**  
Cast iron EN GJL 250 (UNI EN 1561)

**Mechanical seal motor side**  
Graphite/Ceramic

**Mechanical seal impeller side**  
Silicon Carbide/Ceramic

**Base frame**  
Hot-dipped galvanized steel

**Motor shaft**  
Stainless steel AISI 420

**Bolts and nuts**  
Stainless steel Grade A2

**Cable**  
10 meters type NSSHÖU-J 10G2,5mm<sup>2</sup>

**LIMITS TO USE**

**Max temperature of the liquid pumped**  
+40°C

**pH of the liquid pumped**  
6÷10

**Max immersion depth**  
20 m

**Liquid density**  
1,0 kg/dm<sup>3</sup>

**Min immersion depth for continuous service**  
653 mm

**Free passage**  
100 mm

**Max number starts/hour**  
15

**Acoustic pressure level issued**  
<70dB(A)

**MOTOR**

The electric motor is asynchronous with squirrel cage rotor in dry chamber

Class of insulation F  
Protection degree IP68  
4pole; 50Hz

Main voltage values and relative tolerance in relation to the rated voltage value:

**THREE-PHASE**  
400V ±10%

Other voltages on request.

**OTHER FEATURES ON REQUEST**

Frequency 60 Hz (*see specific catalogue*)  
Other voltages

**SECURITY**

Thermal probes in the winding  
Conductivity probe in the oil chamber

**TECHNICAL DATA**

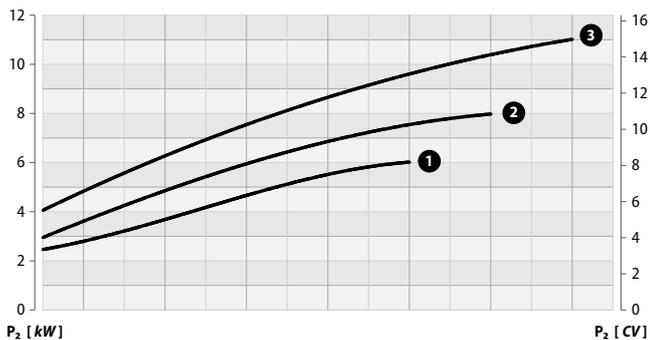
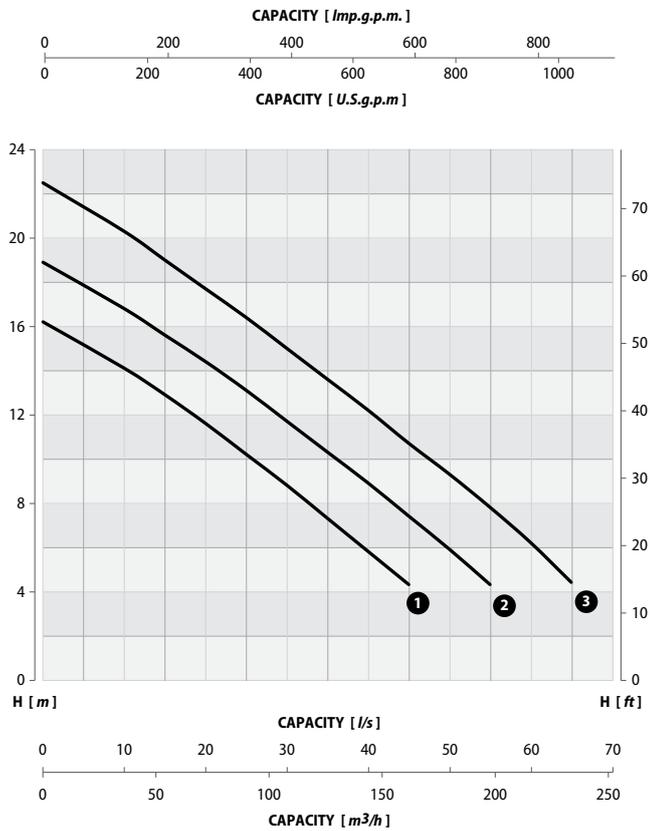
MODEL	P1 kW	P2		VOLTAGE V	CURRENT A	CABLE m	WEIGHT kg
		kW	CV				
<b>504/422</b>	8,0	6,5	8,8	400/690 (3~)	14,5	10	118
<b>704/432</b>	10,4	8,5	11,5	400/690 (3~)	18,5	10	125
<b>904/442</b>	13,5	11,2	15,2	400/690 (3~)	23,5	10	136

<b>F SERIES</b>	<b>504/422-704/432-904/442</b>		<b>VORTEX IMPELLER</b>	<b>DN 100</b>
				<b>50 Hz</b>
				<b>4 POLE</b>

**PERFORMANCE RANGE**

CAPACITY														
<i>l/s</i>	0	10	15	20	25	30	35	40	45	50	55	60	65	
<i>m³/h</i>	0	36	54	72	90	108	126	144	162	180	198	216	234	
<i>l/min</i>	0	600	900	1200	1500	1800	2100	2400	2700	3000	3300	3600	3900	

MODEL	CURVE <i>N°</i>	HEAD <i>m</i>												
		<b>504/422</b>	1	16,2	14,1	12,9	11,6	10,2	8,8	7,3	5,8	4,3	-	-
<b>704/432</b>	2	18,9	16,8	15,6	14,4	13,1	11,7	10,3	8,9	7,4	5,9	4,3	-	-
<b>904/442</b>	3	22,5	20,3	19,0	17,7	16,4	15,0	13,6	12,2	10,7	9,3	7,8	6,2	4,4



Performance tolerance in according to UNI/ISO 9906 Grade 2

**F SERIES**

**504/422-704/432-904/442**



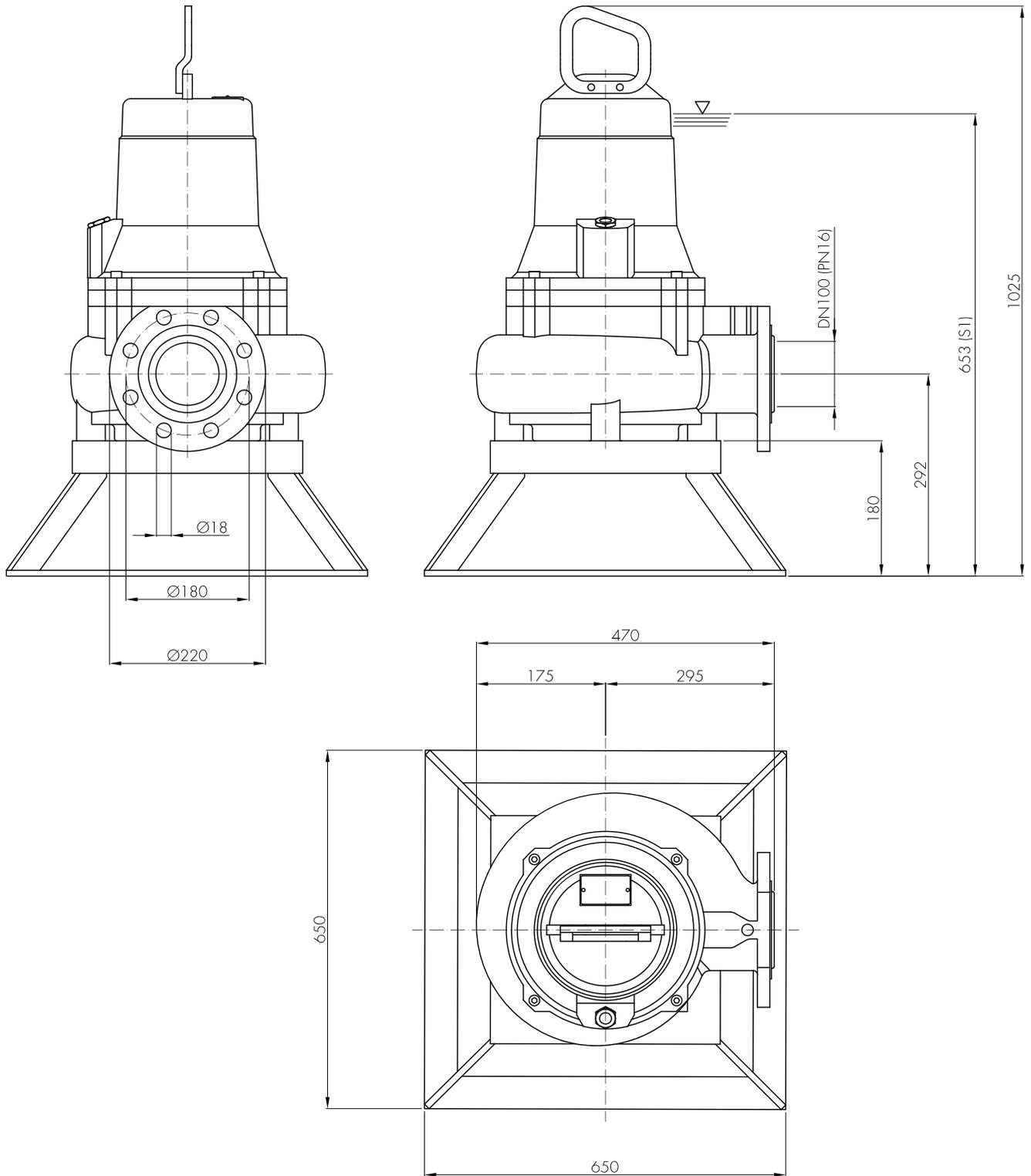
**VORTEX IMPELLER**

**DN 100**

**50 Hz**

**4 POLE**

**INSTALLATION DIMENSIONS**



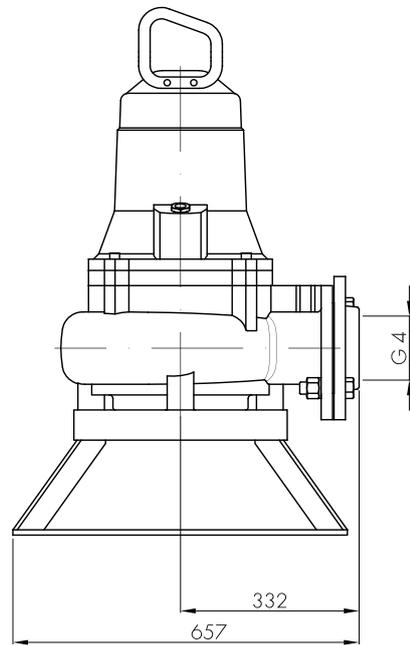
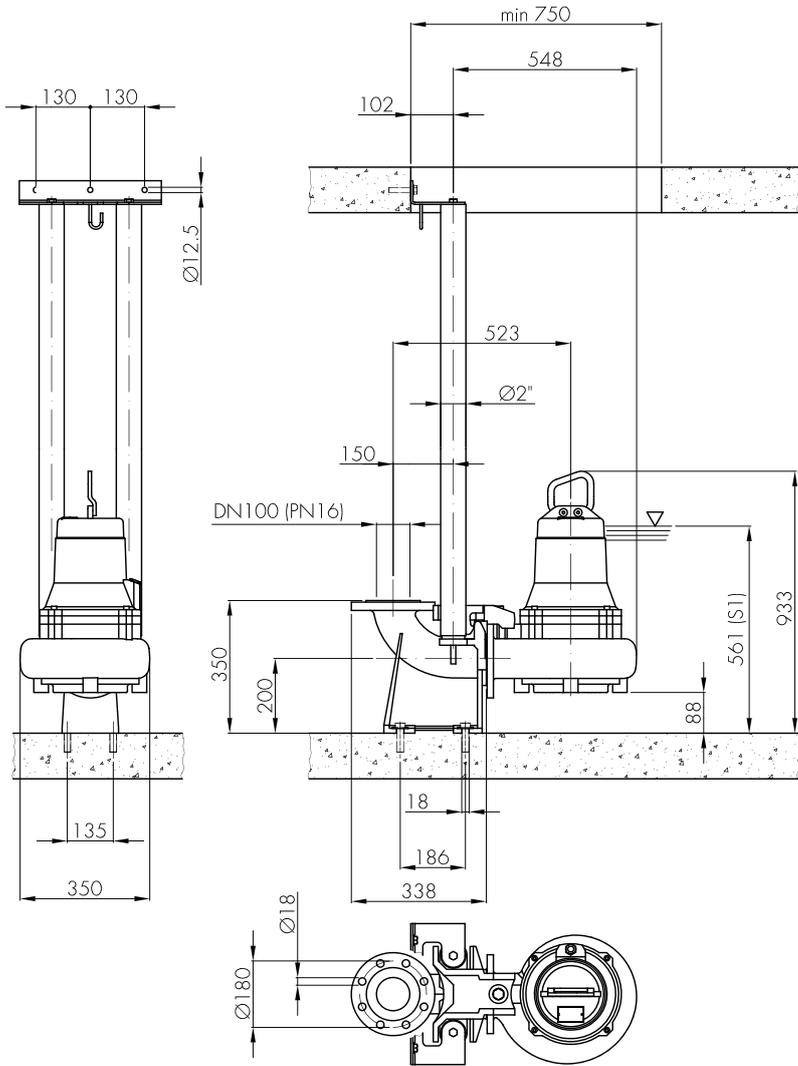
<b>F SERIES</b>	<b>504/422-704/432-904/442</b>		<b>VORTEX IMPELLER</b>	<b>DN 100</b>
				<b>50 Hz</b>
				<b>4 POLE</b>

**PERMANENT INSTALLATION WITH COUPLING SYSTEM**

It is the recommended installation for the permanent pumping station. The electric pump is guided by two pipes and it is connected automatically to the coupling system. The quick connection ensures that the pump can be easily removed and re-installed.

**PORTABLE INSTALLATION**

Transportable as emergency pump with connection to the hose and for free installation in the well.



**NOTES**

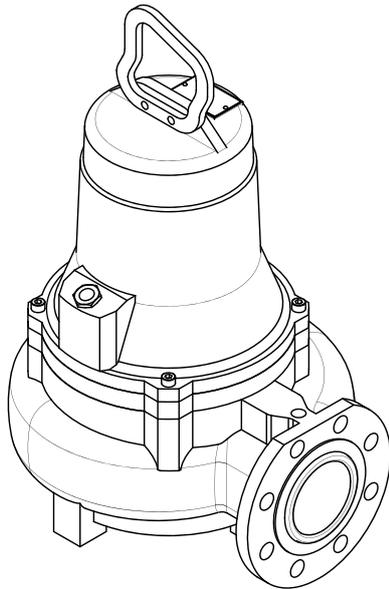


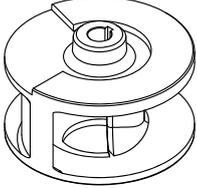
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<b>HYDROPOMPE</b>	<b>SINGLE CHANNEL IMPELLER</b>	<b>DN 100</b>
<b>F SERIES</b>		<b>50 Hz</b>
<b>504/423</b>		<b>4 POLE</b>

#### USE

Submersible electric pumps particularly suitable for pumping industrial sewage, screened waste water and mud in the pumping stations. They can be used also to lift clear and dirty water and rain water.

#### MATERIALS

##### Motor housing

Cast iron EN GJL 250 (UNI EN 1561)

##### Pump housing

Cast iron EN GJL 250 (UNI EN 1561)

##### Bearing housing

Cast iron EN GJL 250 (UNI EN 1561)

##### Impeller

Cast iron EN GJL 250 (UNI EN 1561)

##### Mechanical seal motor side

Graphite/Ceramic

##### Mechanical seal impeller side

Silicon Carbide/Ceramic

##### Base frame

Hot-dipped galvanized steel

##### Motor shaft

Stainless steel AISI 420

##### Bolts and nuts

Stainless steel Grade A2

##### Cable

10 meters type NSSHÖU-J 7G1,5mm<sup>2</sup>

#### LIMITS TO USE

##### Max temperature of the liquid pumped

+40°C

##### pH of the liquid pumped

6÷10

##### Max immersion depth

20 m

##### Liquid density

1,0 kg/dm<sup>3</sup>

##### Min immersion depth for continuous service

635 mm

##### Free passage

80 mm

##### Max number starts/hour

20

##### Acoustic pressure level issued

<70dB(A)

#### MOTOR

The electric motor is asynchronous with squirrel cage rotor in dry chamber

Class of insulation F

Protection degree IP68

4pole; 50Hz

Main voltage values and relative tolerance in relation to the rated voltage value:

##### THREE-PHASE

400V ±10%

Other voltages on request.

#### OTHER FEATURES ON REQUEST

Frequency 60 Hz (*see specific catalogue*)

Other voltages

#### SECURITY

Thermal probes in the winding

Conductivity probe in the oil chamber

#### TECHNICAL DATA

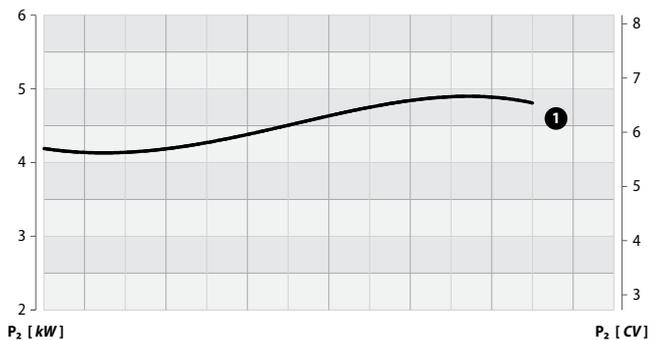
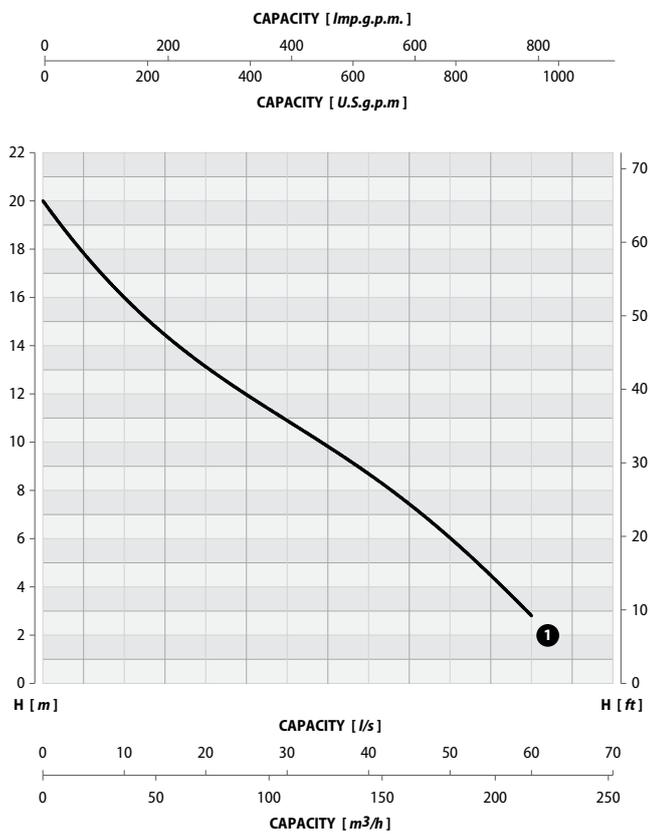
MODEL	P1		P2		VOLTAGE V	CURRENT A	CABLE m	WEIGHT kg
	kW	kW	CV	CV				
<b>504/423</b>	6,6	5,1	6,9	6,9	400 (3~)	11,8	10	89

<b>F SERIES</b>	<b>504/423</b>		<b>DN 100</b>
			<b>50 Hz</b>
			<b>4 POLE</b>

**PERFORMANCE RANGE**

CAPACITY												
<i>l/s</i>	0	10	15	20	25	30	35	40	45	50	55	60
<i>m³/h</i>	0	36	54	72	90	108	126	144	162	180	198	216
<i>l/min</i>	0	600	900	1200	1500	1800	2100	2400	2700	3000	3300	3600

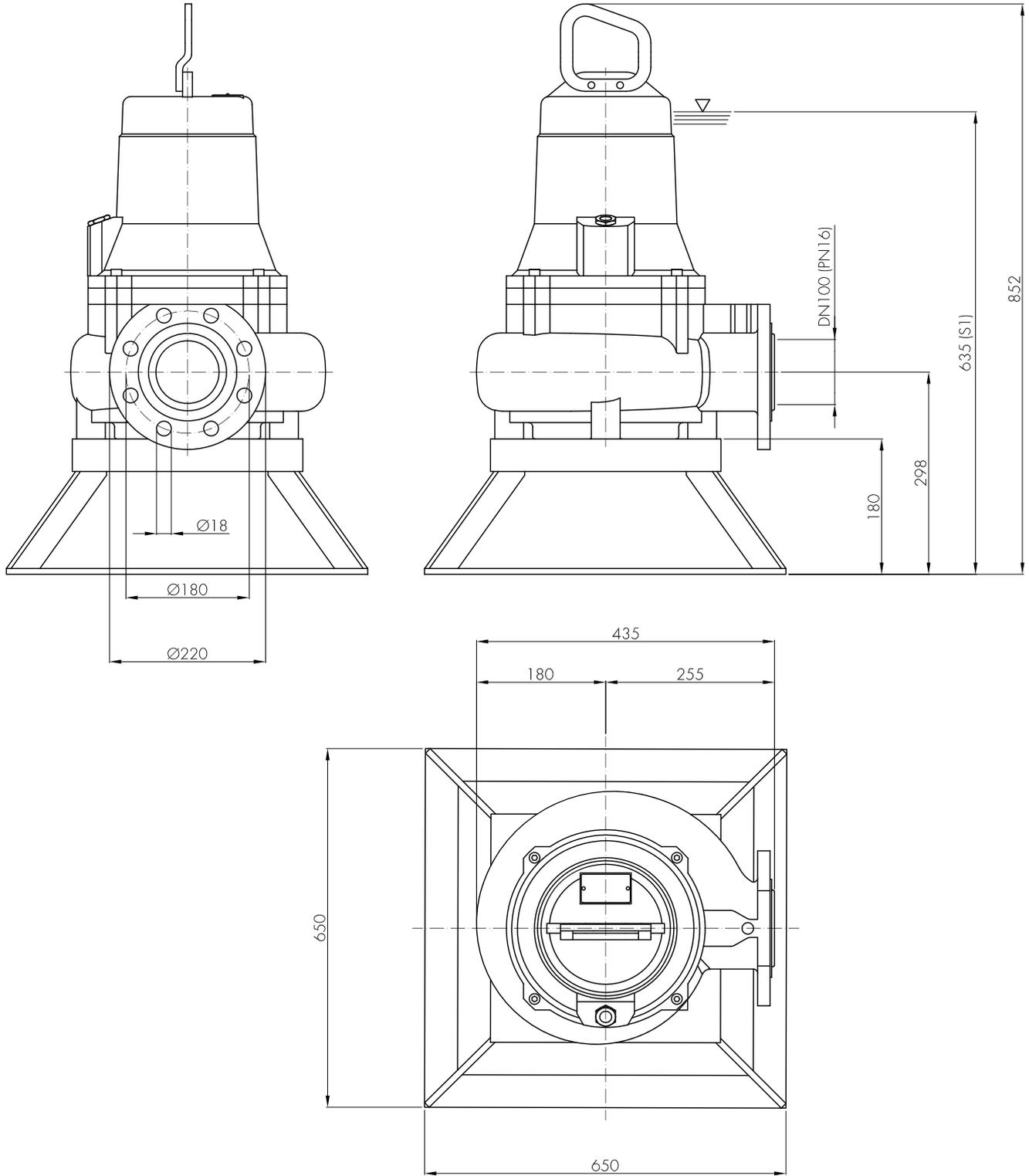
MODEL	CURVE <i>N°</i>	HEAD <i>m</i>											
		<b>504/423</b>	1	20,0	16,0	14,5	13,0	12,0	11,0	9,8	8,6	7,5	6,0



Performance tolerance in according to UNI/ISO 9906 Grade 2

<b>F SERIES</b>	<b>504/423</b>	 <b>SINGLE CHANNEL IMPELLER</b>	<b>DN 100</b>
			<b>50 Hz</b>
			<b>4 POLE</b>

**INSTALLATION DIMENSIONS**



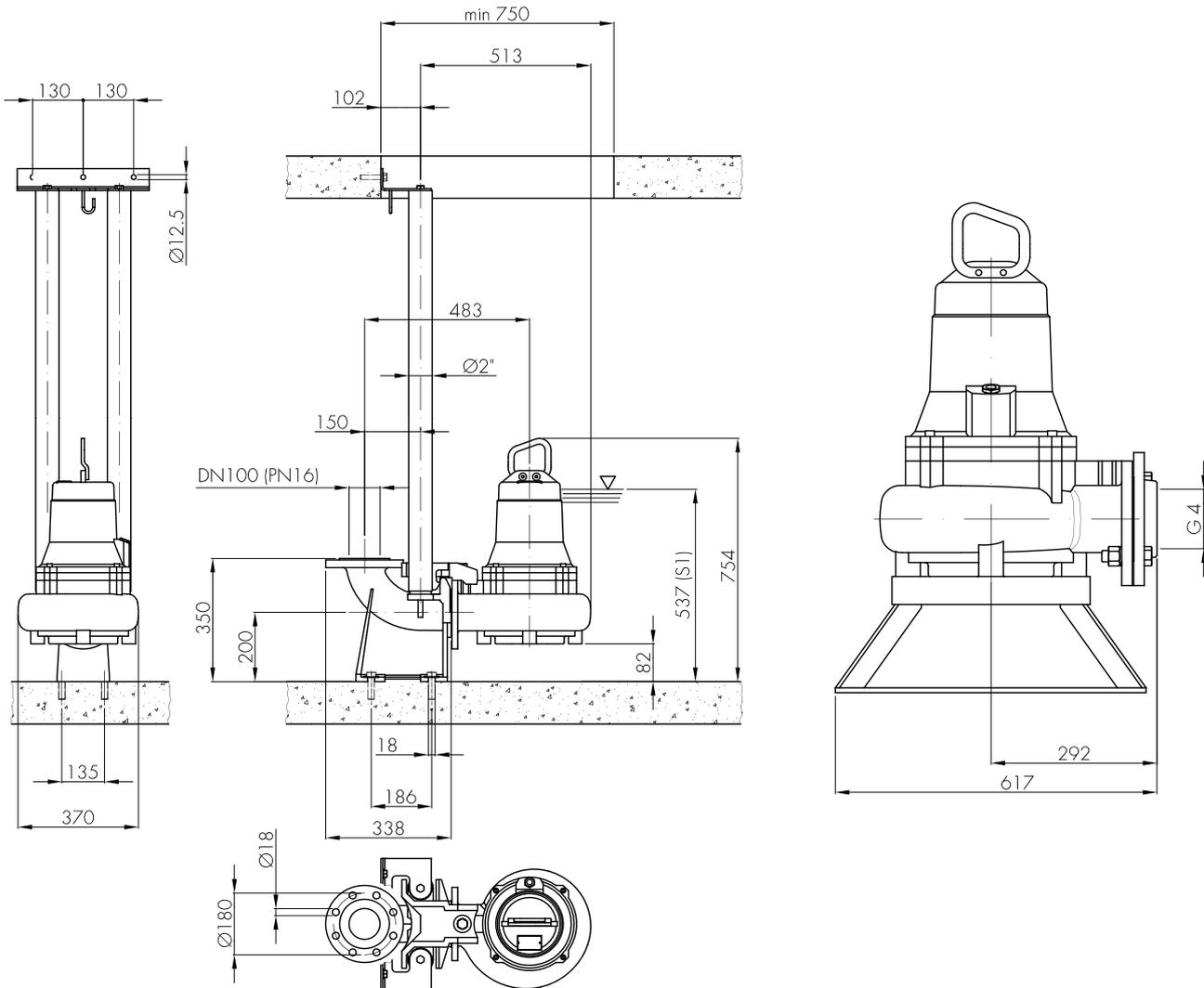
<b>F SERIES</b>	<b>504/423</b>	 <b>SINGLE CHANNEL IMPELLER</b>	<b>DN 100</b>
			<b>50 Hz</b>
			<b>4 POLE</b>

**PERMANENT INSTALLATION WITH COUPLING SYSTEM**

It is the recommended installation for the permanent pumping station. The electric pump is guided by two pipes and it is connected automatically to the coupling system. The quick connection ensures that the pump can be easily removed and re-installed.

**PORTABLE INSTALLATION**

Transportable as emergency pump with connection to the hose and for free installation in the well.



**NOTES**

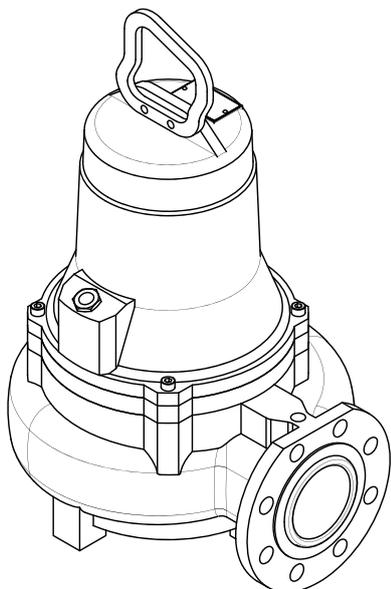


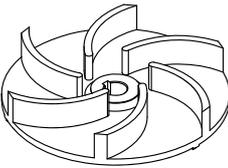
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<b>HYDROPOMPE</b>	<b>VORTEX IMPELLER</b>	<b>DN 100</b>
<b>F SERIES</b>		<b>50 Hz</b>
<b>504/422-704/432-904/442</b>		<b>4 POLE</b>

**USE**

Submersible electric pumps particularly suitable for pumping industrial sewage, screened waste water and mud in the pumping stations. They can be used also to lift clear and dirty water and rain water.

**MATERIALS**

**Motor housing**  
Cast iron EN GJL 250 (UNI EN 1561)

**Pump housing**  
Cast iron EN GJL 250 (UNI EN 1561)

**Bearing housing**  
Cast iron EN GJL 250 (UNI EN 1561)

**Impeller**  
Cast iron EN GJL 250 (UNI EN 1561)

**Mechanical seal motor side**  
Graphite/Ceramic

**Mechanical seal impeller side**  
Silicon Carbide/Ceramic

**Base frame**  
Hot-dipped galvanized steel

**Motor shaft**  
Stainless steel AISI 420

**Bolts and nuts**  
Stainless steel Grade A2

**Cable**  
10 meters type NSSHÖU-J 10G2,5mm<sup>2</sup>

**LIMITS TO USE**

**Max temperature of the liquid pumped**  
+40°C

**pH of the liquid pumped**  
6÷10

**Max immersion depth**  
20 m

**Liquid density**  
1,0 kg/dm<sup>3</sup>

**Min immersion depth for continuous service**  
653 mm

**Free passage**  
100 mm

**Max number starts/hour**  
15

**Acoustic pressure level issued**  
<70dB(A)

**MOTOR**

The electric motor is asynchronous with squirrel cage rotor in dry chamber

Class of insulation F  
Protection degree IP68  
4pole; 50Hz

Main voltage values and relative tolerance in relation to the rated voltage value:

**THREE-PHASE**  
400V ±10%

Other voltages on request.

**OTHER FEATURES ON REQUEST**

Frequency 60 Hz (*see specific catalogue*)  
Other voltages

**SECURITY**

Thermal probes in the winding  
Conductivity probe in the oil chamber

**TECHNICAL DATA**

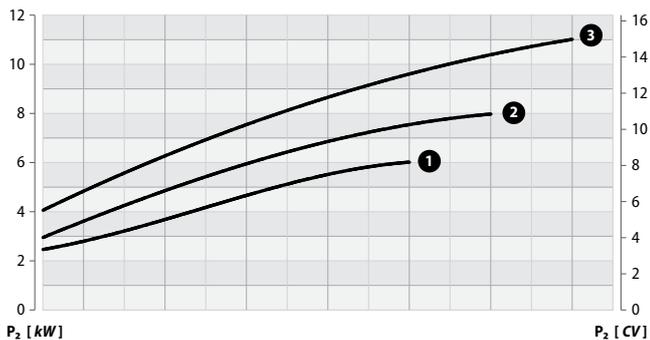
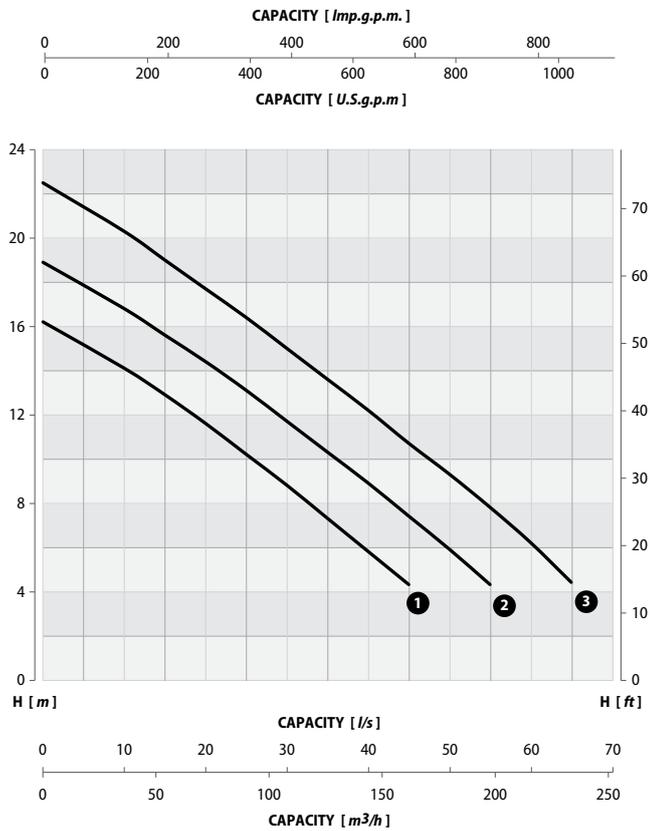
MODEL	P1 kW	P2		VOLTAGE V	CURRENT A	CABLE m	WEIGHT kg
		kW	CV				
<b>504/422</b>	8,0	6,5	8,8	400/690 (3~)	14,5	10	118
<b>704/432</b>	10,4	8,5	11,5	400/690 (3~)	18,5	10	125
<b>904/442</b>	13,5	11,2	15,2	400/690 (3~)	23,5	10	136

<b>F SERIES</b>	<b>504/422-704/432-904/442</b>		<b>VORTEX IMPELLER</b>	<b>DN 100</b>
				<b>50 Hz</b>
				<b>4 POLE</b>

**PERFORMANCE RANGE**

CAPACITY													
<i>l/s</i>	0	10	15	20	25	30	35	40	45	50	55	60	65
<i>m³/h</i>	0	36	54	72	90	108	126	144	162	180	198	216	234
<i>l/min</i>	0	600	900	1200	1500	1800	2100	2400	2700	3000	3300	3600	3900

MODEL	CURVE <i>N°</i>	HEAD <i>m</i>												
		<b>504/422</b>	1	16,2	14,1	12,9	11,6	10,2	8,8	7,3	5,8	4,3	-	-
<b>704/432</b>	2	18,9	16,8	15,6	14,4	13,1	11,7	10,3	8,9	7,4	5,9	4,3	-	-
<b>904/442</b>	3	22,5	20,3	19,0	17,7	16,4	15,0	13,6	12,2	10,7	9,3	7,8	6,2	4,4



Performance tolerance in according to UNI/ISO 9906 Grade 2

**F SERIES**

**504/422-704/432-904/442**



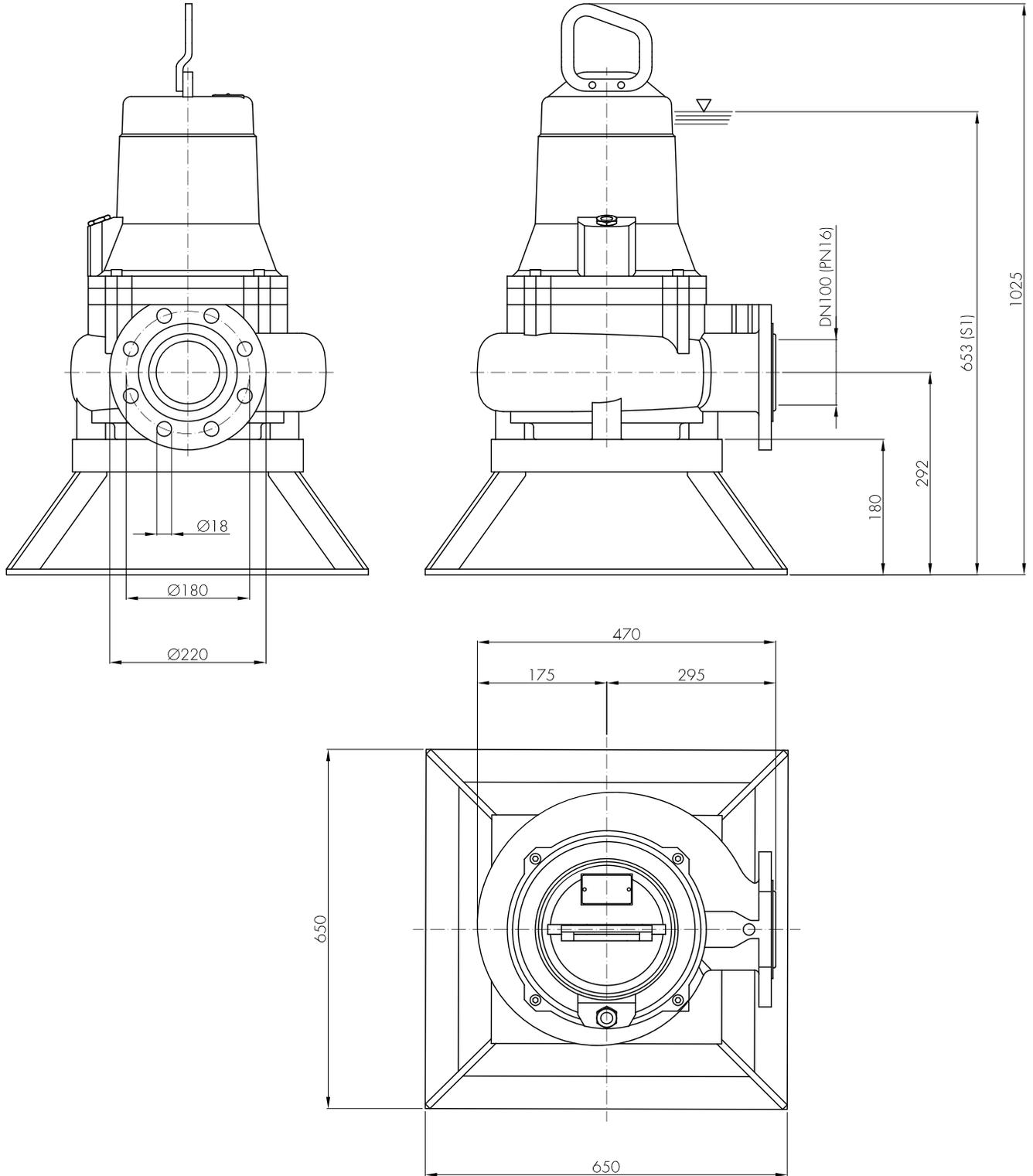
**VORTEX IMPELLER**

**DN 100**

**50 Hz**

**4 POLE**

**INSTALLATION DIMENSIONS**



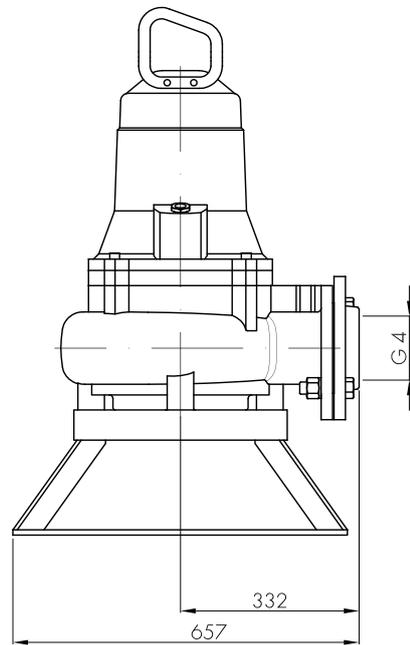
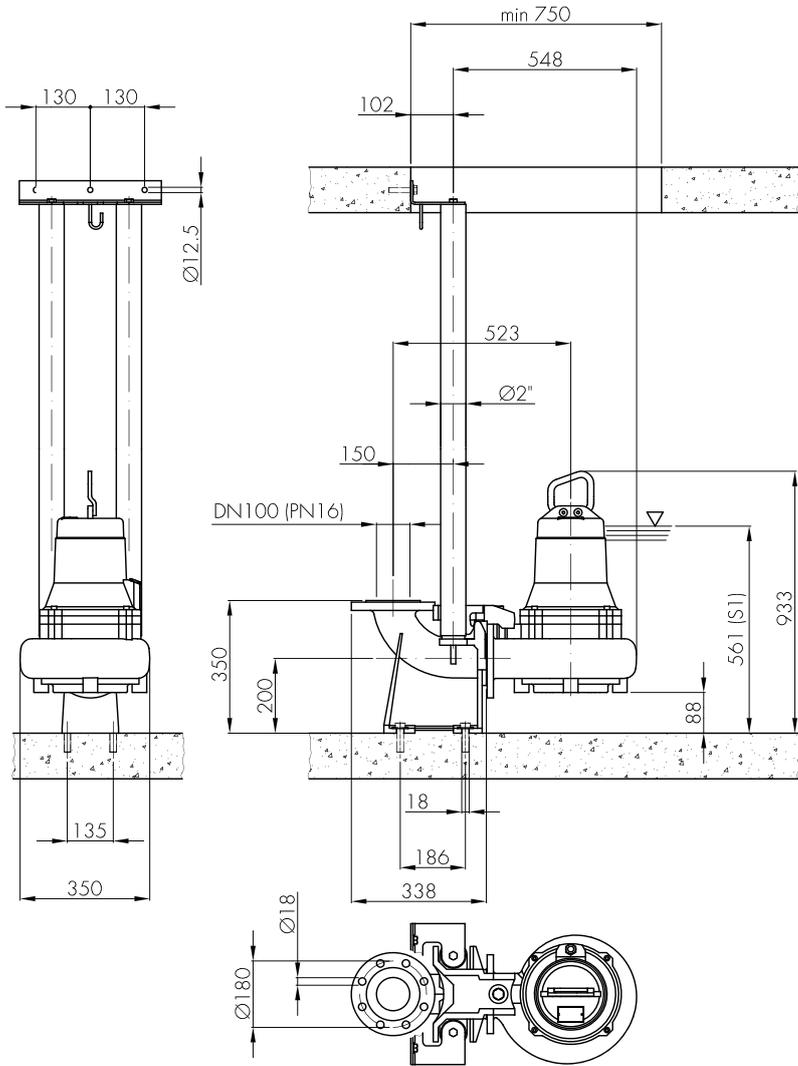
<b>F SERIES</b>	<b>504/422-704/432-904/442</b>		<b>VORTEX IMPELLER</b>	<b>DN 100</b>
				<b>50 Hz</b>
				<b>4 POLE</b>

**PERMANENT INSTALLATION WITH COUPLING SYSTEM**

It is the recommended installation for the permanent pumping station. The electric pump is guided by two pipes and it is connected automatically to the coupling system. The quick connection ensures that the pump can be easily removed and re-installed.

**PORTABLE INSTALLATION**

Transportable as emergency pump with connection to the hose and for free installation in the well.



**NOTES**

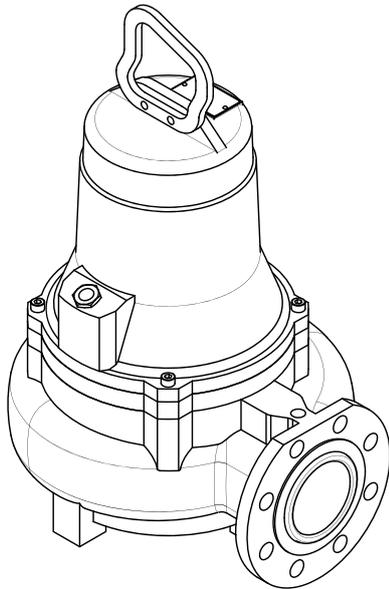


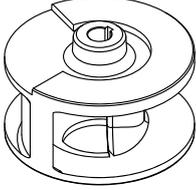
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<b>HYDROPOMPE</b>	<b>SINGLE CHANNEL IMPELLER</b>	<b>DN 150</b>
<b>F SERIES</b>		<b>50 Hz</b>
<b>704/433-1154/453-1504/463</b>		<b>4 POLE</b>

#### USE

Submersible electric pumps particularly suitable for pumping industrial sewage, screened waste water and mud in the pumping stations. They can be used also to lift clear and dirty water and rain water.

#### MATERIALS

##### Motor housing

Cast iron EN GJL 250 (UNI EN 1561)

##### Pump housing

Cast iron EN GJL 250 (UNI EN 1561)

##### Bearing housing

Cast iron EN GJL 250 (UNI EN 1561)

##### Impeller

Cast iron EN GJL 250 (UNI EN 1561)

##### Mechanical seal motor side

Graphite/Ceramic

##### Mechanical seal impeller side

Silicon Carbide/Ceramic

##### Base frame

Hot-dipped galvanized steel

##### Motor shaft

Stainless steel AISI 420

##### Bolts and nuts

Stainless steel Grade A2

##### Cable

10 meters type NSSHÖU-J 10G2,5mm<sup>2</sup>

#### LIMITS TO USE

##### Max temperature of the liquid pumped

+40°C

##### pH of the liquid pumped

6÷10

##### Max immersion depth

20 m

##### Liquid density

1,0 kg/dm<sup>3</sup>

##### Min immersion depth for continuous service

635 mm

##### Free passage

100 mm

##### Max number starts/hour

15

##### Acoustic pressure level issued

<70dB(A)

#### MOTOR

The electric motor is asynchronous with squirrel cage rotor in dry chamber

Class of insulation F

Protection degree IP68

4pole; 50Hz

Main voltage values and relative tolerance in relation to the rated voltage value:

##### THREE-PHASE

400V ±10%

Other voltages on request.

#### OTHER FEATURES ON REQUEST

Frequency 60 Hz (*see specific catalogue*)

Other voltages

#### SECURITY

Thermal probes in the winding

Conductivity probe in the oil chamber

#### TECHNICAL DATA

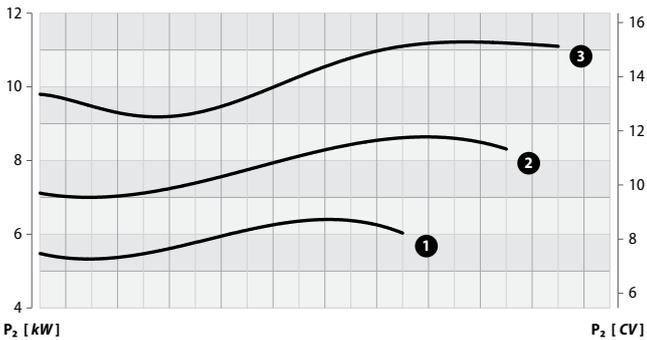
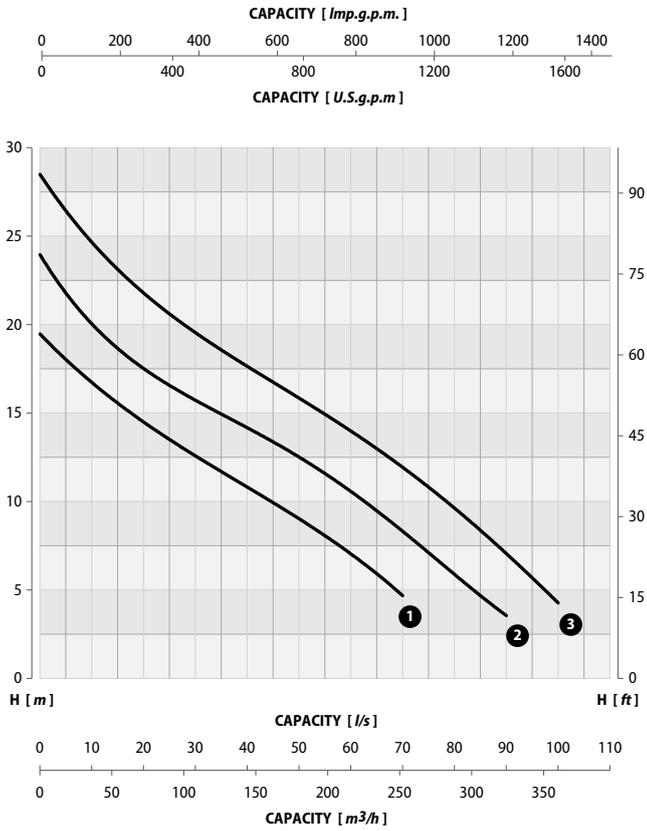
MODEL	P1 kW	P2		VOLTAGE V	CURRENT A	CABLE m	WEIGHT kg
		kW	CV				
<b>704/433</b>	8,0	6,5	8,8	400/690 (3~)	14,5	10	156
<b>1154/453</b>	10,4	8,5	11,5	400/690 (3~)	18,5	10	163
<b>1504/463</b>	13,5	11,2	15,2	400/690 (3~)	23,5	10	174

<b>F SERIES</b>	<b>704/433-1154/453-1504/463</b>		<b>DN 150</b>
			<b>50 Hz</b>
			<b>4 POLE</b>

**PERFORMANCE RANGE**

CAPACITY														
<i>l/s</i>	0	15	20	30	40	45	50	55	60	65	70	80	90	100
<i>m³/h</i>	0	54	72	108	144	162	180	198	216	234	252	288	324	360
<i>l/min</i>	0	900	1200	1800	2400	2700	3000	3300	3600	3900	4200	4800	5400	6000

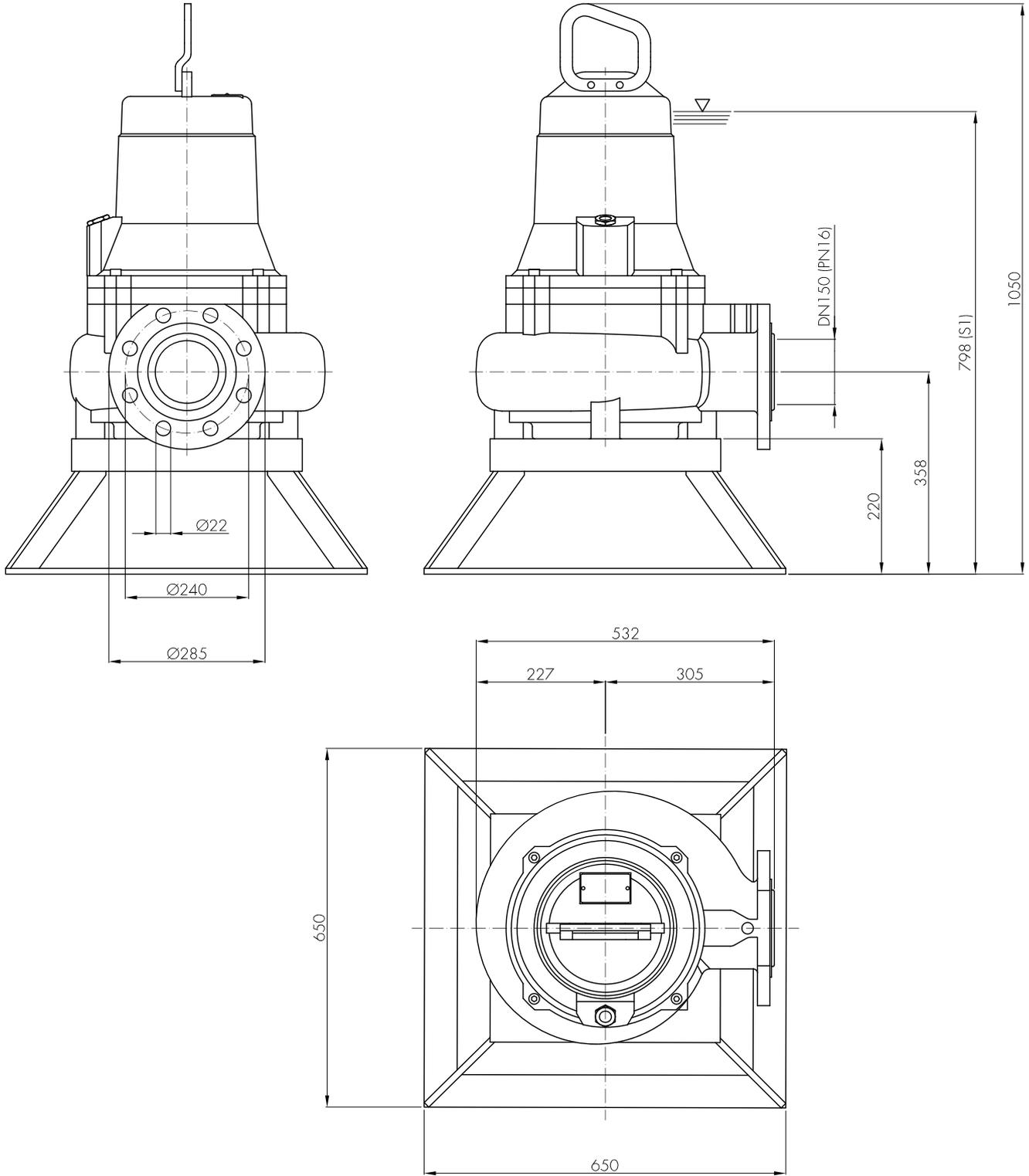
MODEL	CURVE N°	HEAD <i>m</i>													
		<b>704/433</b>	1	19,5	15,5	14,5	12,5	11,0	10,0	9,0	8,0	7,0	5,8	4,8	-
<b>1154/453</b>	2	24,0	18,5	17,5	16,0	14,0	13,5	12,5	11,5	10,5	9,5	8,3	6,0	3,5	-
<b>1504/463</b>	3	28,5	23,0	22,0	19,5	17,6	16,7	15,8	15,0	14,0	13,0	12,0	9,6	7,0	4,3



Performance tolerance in according to UNI/ISO 9906 Grade 2

<b>F SERIES</b>	<b>704/433-1154/453-1504/463</b>	 <b>SINGLE CHANNEL IMPELLER</b>	<b>DN 150</b>
			<b>50 Hz</b>
			<b>4 POLE</b>

**INSTALLATION DIMENSIONS**



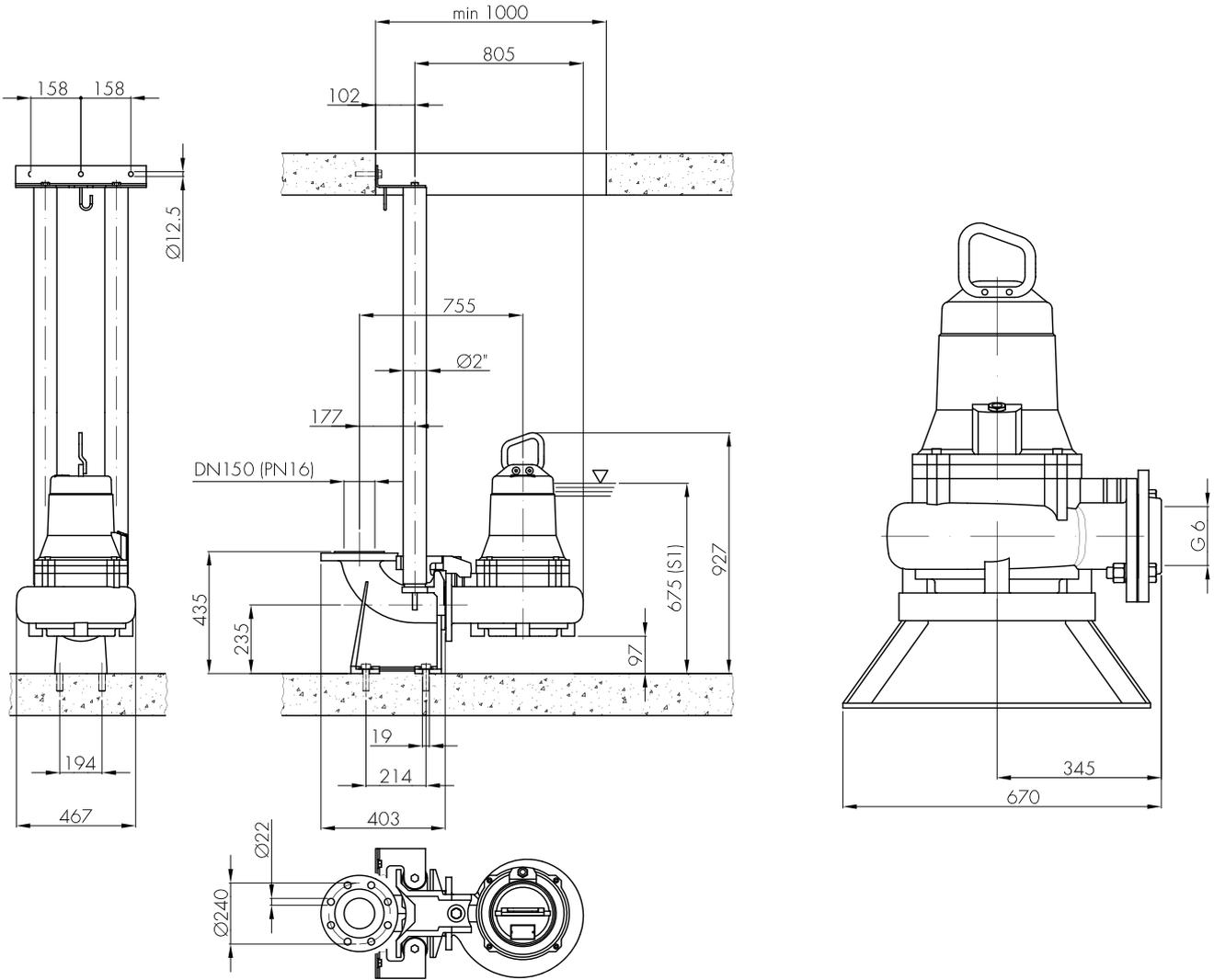
<b>F SERIES</b>	<b>704/433-1154/453-1504/463</b>		<b>DN 150</b>
			<b>50 Hz</b>
			<b>4 POLE</b>

**PERMANENT INSTALLATION WITH COUPLING SYSTEM**

It is the recommended installation for the permanent pumping station. The electric pump is guided by two pipes and it is connected automatically to the coupling system. The quick connection ensures that the pump can be easily removed and re-installed.

**PORTABLE INSTALLATION**

Transportable as emergency pump with connection to the hose and for free installation in the well.



**NOTES**

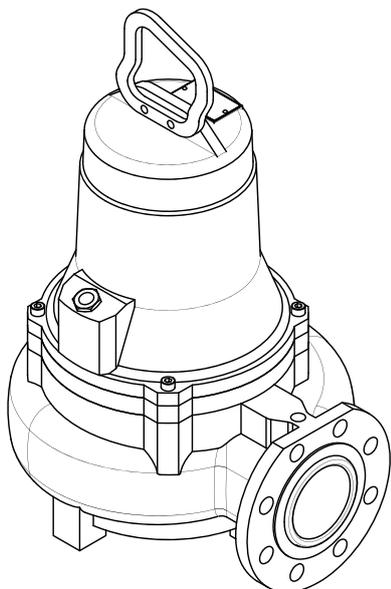


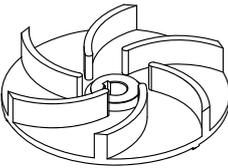
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<b>HYDROPOMPE</b>	<b>VORTEX IMPELLER</b>	<b>DN 100</b>
<b>F SERIES</b>		<b>50 Hz</b>
<b>504/422-704/432-904/442</b>		<b>4 POLE</b>

**USE**

Submersible electric pumps particularly suitable for pumping industrial sewage, screened waste water and mud in the pumping stations. They can be used also to lift clear and dirty water and rain water.

**MATERIALS**

**Motor housing**  
Cast iron EN GJL 250 (UNI EN 1561)

**Pump housing**  
Cast iron EN GJL 250 (UNI EN 1561)

**Bearing housing**  
Cast iron EN GJL 250 (UNI EN 1561)

**Impeller**  
Cast iron EN GJL 250 (UNI EN 1561)

**Mechanical seal motor side**  
Graphite/Ceramic

**Mechanical seal impeller side**  
Silicon Carbide/Ceramic

**Base frame**  
Hot-dipped galvanized steel

**Motor shaft**  
Stainless steel AISI 420

**Bolts and nuts**  
Stainless steel Grade A2

**Cable**  
10 meters type NSSHÖU-J 10G2,5mm<sup>2</sup>

**LIMITS TO USE**

**Max temperature of the liquid pumped**  
+40°C

**pH of the liquid pumped**  
6÷10

**Max immersion depth**  
20 m

**Liquid density**  
1,0 kg/dm<sup>3</sup>

**Min immersion depth for continuous service**  
653 mm

**Free passage**  
100 mm

**Max number starts/hour**  
15

**Acoustic pressure level issued**  
<70dB(A)

**MOTOR**

The electric motor is asynchronous with squirrel cage rotor in dry chamber  
Class of insulation F  
Protection degree IP68  
4pole; 50Hz

Main voltage values and relative tolerance in relation to the rated voltage value:

**THREE-PHASE**  
400V ±10%

Other voltages on request.

**OTHER FEATURES ON REQUEST**

Frequency 60 Hz (*see specific catalogue*)  
Other voltages

**SECURITY**

Thermal probes in the winding  
Conductivity probe in the oil chamber

**TECHNICAL DATA**

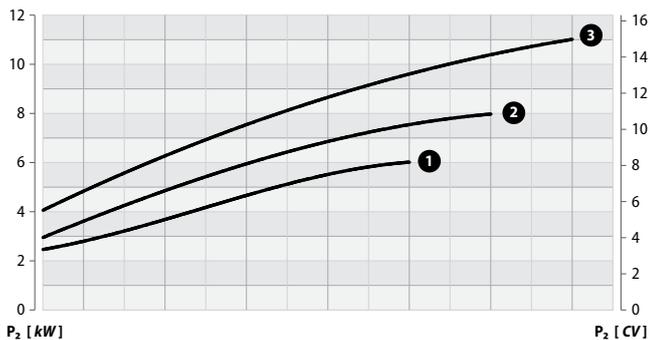
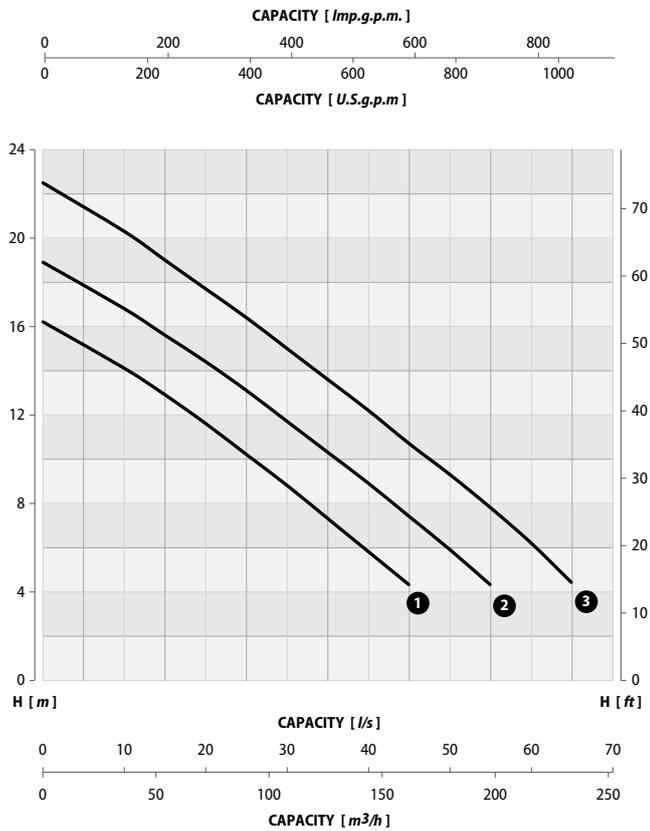
MODEL	P1 kW	P2		VOLTAGE V	CURRENT A	CABLE m	WEIGHT kg
		kW	CV				
<b>504/422</b>	8,0	6,5	8,8	400/690 (3~)	14,5	10	118
<b>704/432</b>	10,4	8,5	11,5	400/690 (3~)	18,5	10	125
<b>904/442</b>	13,5	11,2	15,2	400/690 (3~)	23,5	10	136

<b>F SERIES</b>	<b>504/422-704/432-904/442</b>		<b>VORTEX IMPELLER</b>	<b>DN 100</b>
				<b>50 Hz</b>
				<b>4 POLE</b>

**PERFORMANCE RANGE**

CAPACITY													
<i>l/s</i>	0	10	15	20	25	30	35	40	45	50	55	60	65
<i>m³/h</i>	0	36	54	72	90	108	126	144	162	180	198	216	234
<i>l/min</i>	0	600	900	1200	1500	1800	2100	2400	2700	3000	3300	3600	3900

MODEL	CURVE <i>N°</i>	HEAD <i>m</i>												
		<b>504/422</b>	1	16,2	14,1	12,9	11,6	10,2	8,8	7,3	5,8	4,3	-	-
<b>704/432</b>	2	18,9	16,8	15,6	14,4	13,1	11,7	10,3	8,9	7,4	5,9	4,3	-	-
<b>904/442</b>	3	22,5	20,3	19,0	17,7	16,4	15,0	13,6	12,2	10,7	9,3	7,8	6,2	4,4



Performance tolerance in according to UNI/ISO 9906 Grade 2

**F SERIES**

**504/422-704/432-904/442**



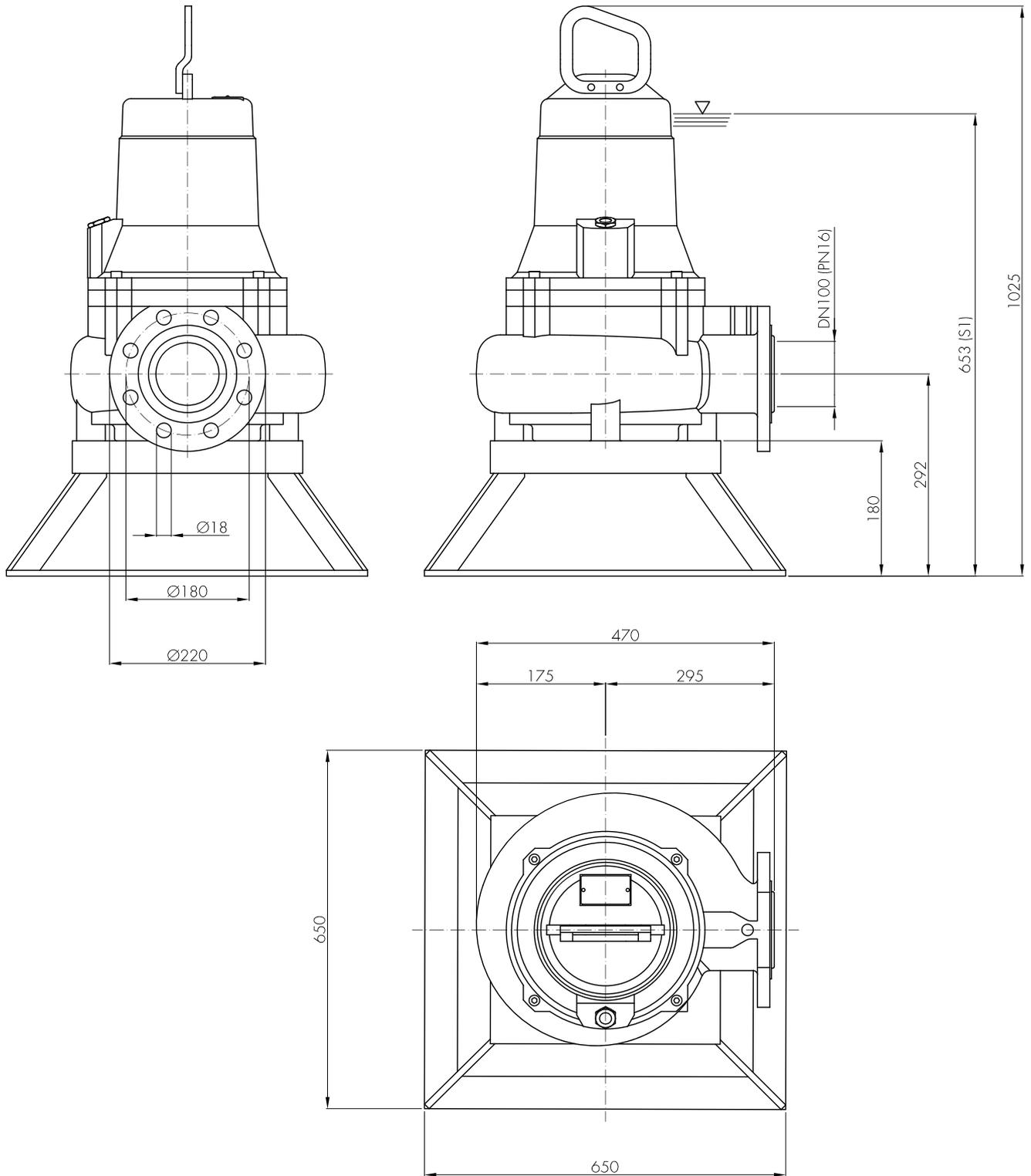
**VORTEX IMPELLER**

**DN 100**

**50 Hz**

**4 POLE**

**INSTALLATION DIMENSIONS**



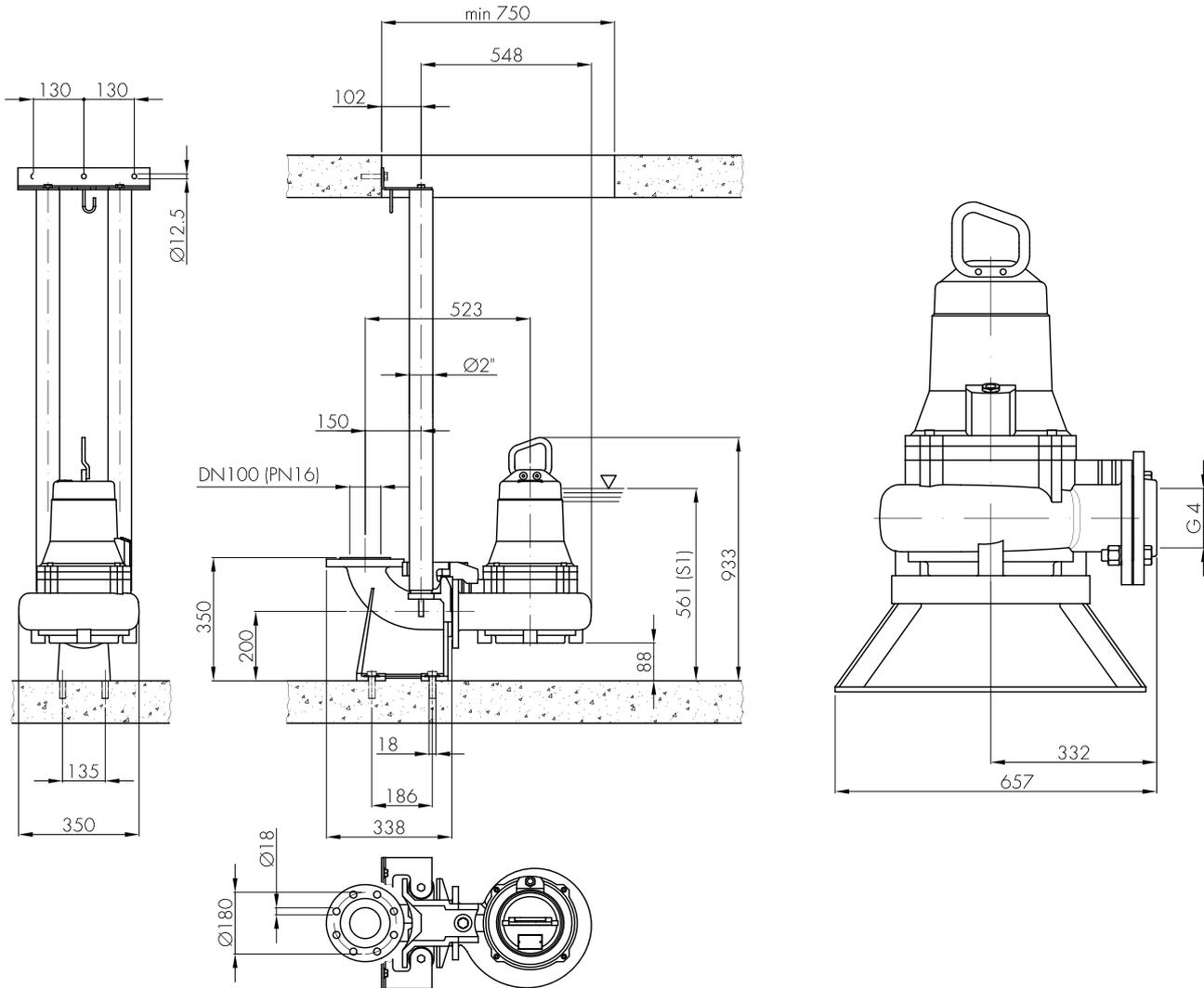
<b>F SERIES</b>	<b>504/422-704/432-904/442</b>		<b>VORTEX IMPELLER</b>	<b>DN 100</b>
				<b>50 Hz</b>
				<b>4 POLE</b>

**PERMANENT INSTALLATION WITH COUPLING SYSTEM**

**PORTABLE INSTALLATION**

It is the recommended installation for the permanent pumping station. The electric pump is guided by two pipes and it is connected automatically to the coupling system. The quick connection ensures that the pump can be easily removed and re-installed.

Transportable as emergency pump with connection to the hose and for free installation in the well.



**NOTES**



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