



**Franklin Electric**

# SUBMERSIBLE PUMPS FOR SEWAGE

ED, EG, FWX, FWC, FGX, FGR, FLV SERIES





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 For the most up-to-date product information, visit [franklinwater.eu](http://franklinwater.eu).

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# Sewage pumps 50 Hz

ED, EG SERIES



## ED Series - Sewage submersible pumps

- Suitable for clean and dirty water
- Open two-channel impeller construction, particularly suitable for liquids containing solids up to 35 mm grain size
- All internal and external parts in contact with the pumped liquid are made of AISI 304 stainless steel
- G 1½" vertical upward discharge port, allowing installation in small pits without the need for an elbow on the pump
- Double mechanical seal in oil chamber, separating the motor from the pumped liquid and providing additional protection against accidental dry running
- Dry-winding motor, designed in accordance with: EN 60034-1, EN60335-1, EN 60335-2-41
- Float switch with easy adjustment to set pump start/stop levels
- Polypropylene handle with stainless steel frame

### Technical data

- Flow: up to 26 m<sup>3</sup>/h
- Total head: up to 13 m
- Motor power: 0.55 - 0.9 kW
- Minimum immersion depth: 248 mm
- Maximum immersion depth: 5 m
- Maximum solids size: 35 mm



✓ Fully Stainless steel construction

Power cable with plug

for single-phase pumps

Easy inspection of the capacitor area

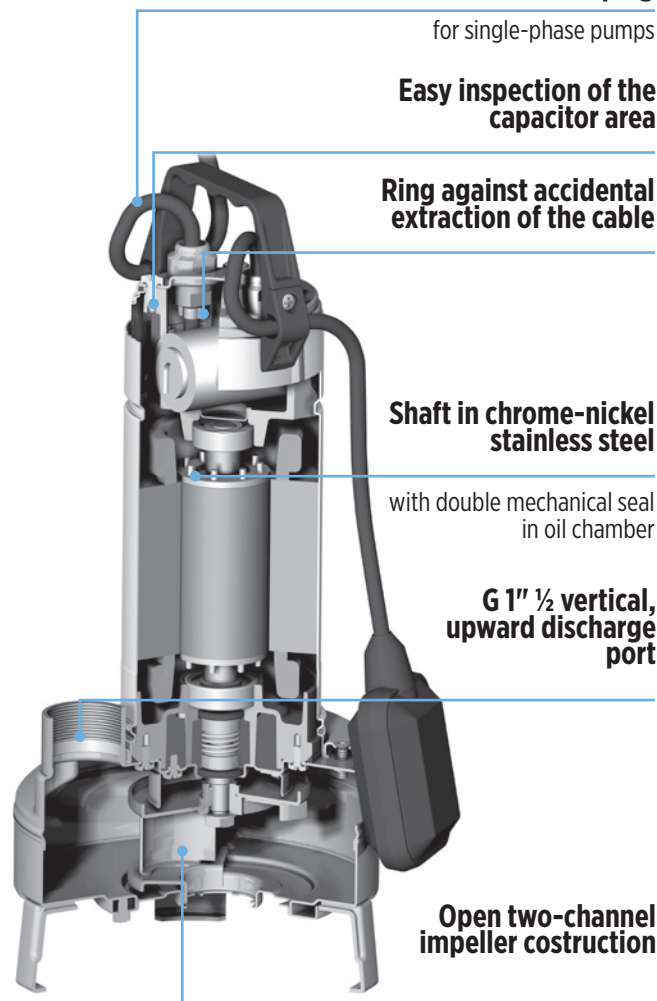
Ring against accidental extraction of the cable

Shaft in chrome-nickel stainless steel

with double mechanical seal in oil chamber

G 1" ½ vertical, upward discharge port

Open two-channel impeller construction



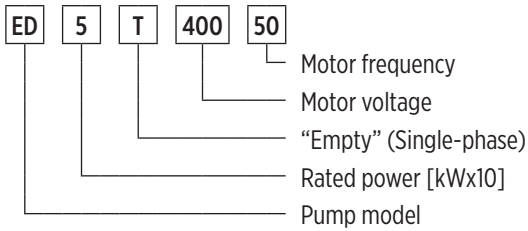
For clean and dirty water, containing solids up to 35 mm grain size



The construction with smooth surfaces in rolled-stainless steel and easy access for cleaning is suitable for certain uses in the food industry

# ED Series - Sewage submersible pumps

## PRODUCT IDENTIFICATION CODE



00140020EN 09/2023

## GENERAL FEATURES

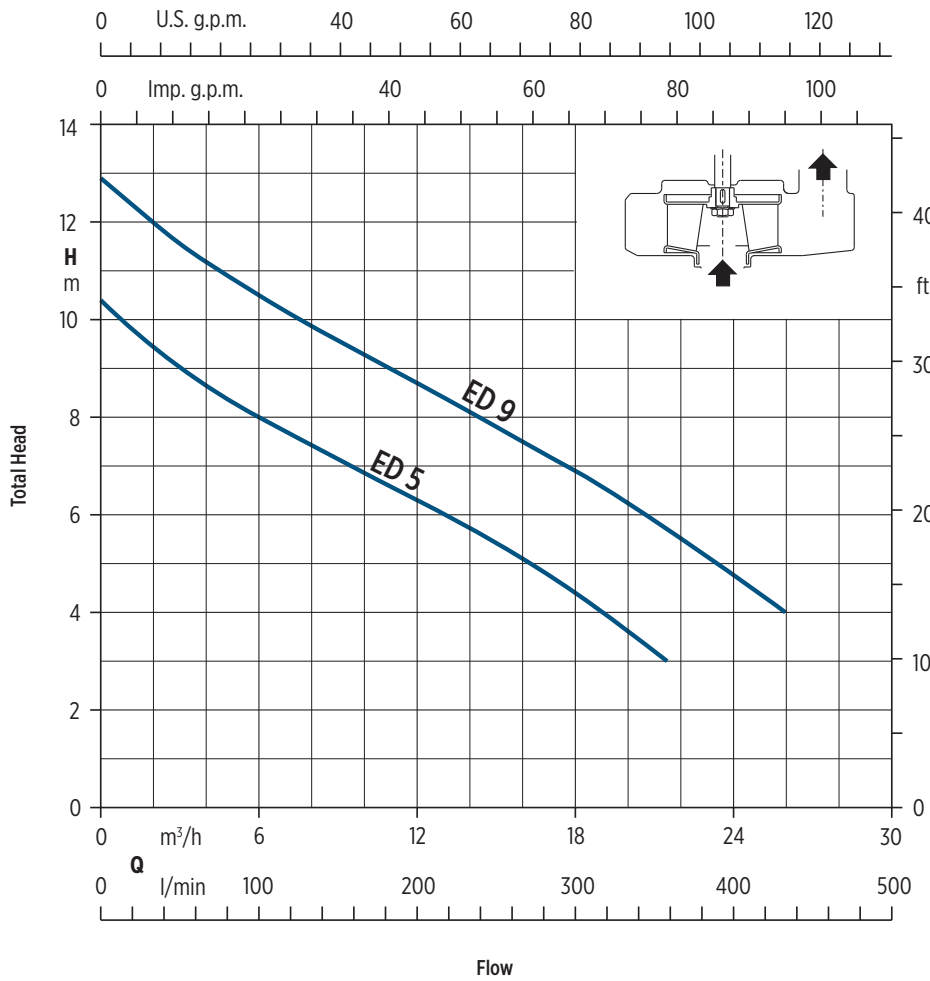
Model	ED
Max. head	up to 13 m
Flow [m <sup>3</sup> /h]	up to 26 m <sup>3</sup> /h
Maximum liquid temperature [°C]	up to 35 °C
Minimum immersion depth	248 mm
Maximum immersion depth	5 m
Maximum solids size	35 mm
Power cable	H07RN-F, 3G1 mm <sup>2</sup> , length 10 m (5 m for ED5), with plug Cel-UnaL 47166 / Schuko
Motor power [kW]	0.55 - 0.9 kW
Motor type	2-pole induction motor, 50 Hz (n ≈ 2900 rpm)
Motor standard voltage	230 V ± 10 %; with thermal protector
Protections	Insulation class: F Protection: IPX8 (for continuous immersion) Triple impregnation humidity-proof dry winding
Capacitor	Built-in for single phase version
Float switch	Included in single phase version

# ED Series - Sewage submersible pumps

HYDRAULIC PERFORMANCE 50 HZ ≈ 2900 1/MIN

Pump model	1x230 V			P <sub>1</sub>	P <sub>2</sub>		Q = Delivery									
	[A]	[μf]	[Vc]		[kW]	[HP]	m <sup>3</sup> /h 0	3	6	9	12	15	18	21	24	26
							l/min 0	50	100	150	200	250	300	350	400	433
							US GPM 0	13,2	26,4	39,6	52,8	66,0	79,3	92,5	105,7	114,5
	H = Total meters head of water column [m]															
ED 5	4,6	16	450	1	0,55	0,75	10,4	9	8	7,1	6,3	5,4	4,4	3,2	-	-
ED 9	6,6	25	450	1,45	0,9	1,2	12,9	11,6	10,5	9,5	8,7	7,8	6,9	5,9	4,7	4

Application range



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# ED Series - Sewage submersible pumps

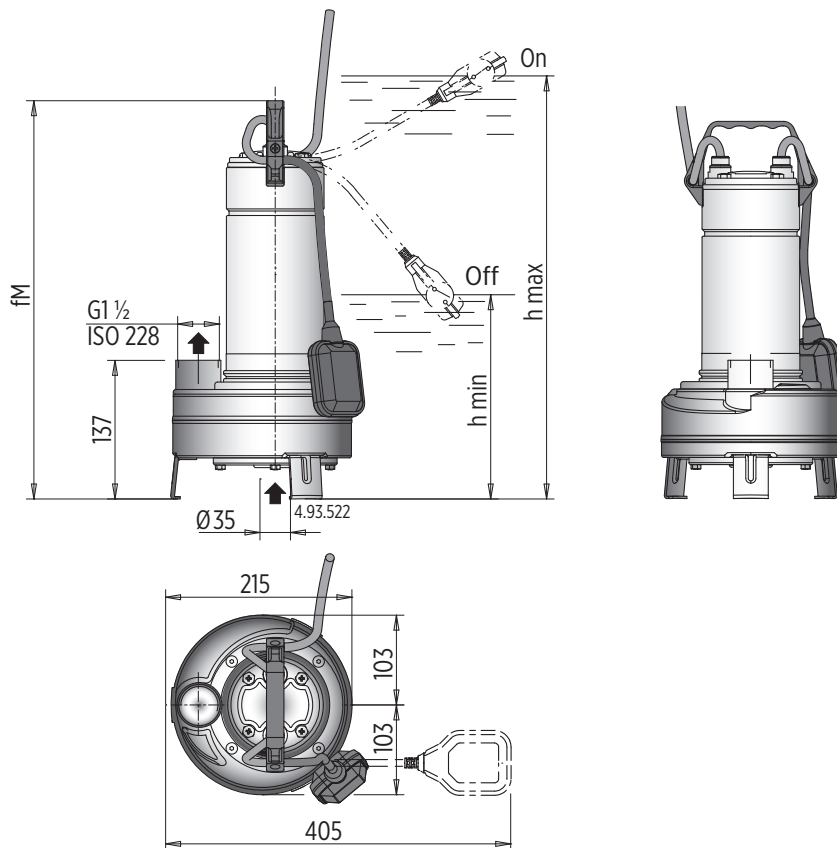
## MATERIALS

Parts description	Material	Standard	
		ASTM/AISI	DIN/EN
Pump casing / Impeller Motor jacket / Jacket cover Casing cover / Shaft	Chrome-nickel steel	AISI 304	1.4301 / EN 10088
Handle	Polypropylene (with frame in AISI 304)	-	-
Upper mechanical seal / Lower mechanical seal	Ceramic alumina / Carbon / NBR	-	-
Seal lubrication oil	Oil for food / Pharmaceutical machinery	-	-

## DIMENSIONS

Pump model	Dimensions [mm]			Pump weight [Kg]	
	fM	h max	h min	Single-phase	Three-phase
ED 5	433	508	248	12	10.3
ED 9	458	533	273	14	12.5

## DIMENSIONAL DRAWINGS

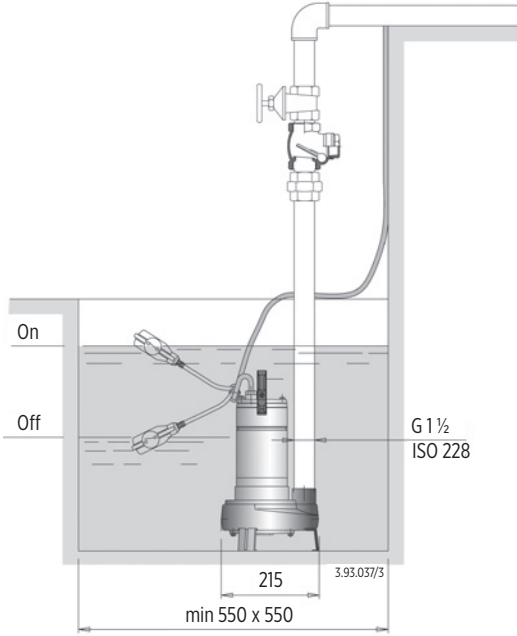


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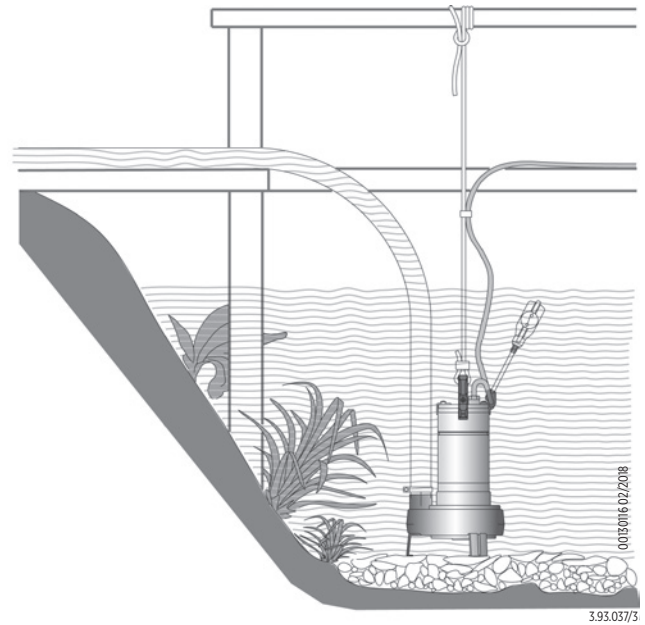
# ED Series - Sewage submersible pumps

## INSTALLATION

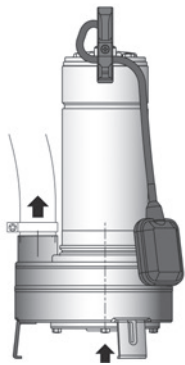
### Stationary installation



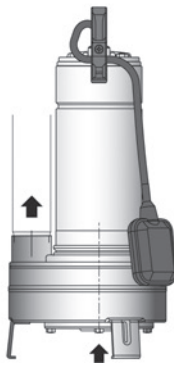
### Transportable installation



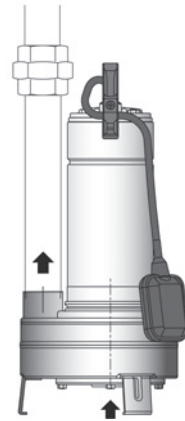
### Connection examples



Pump with hose tail seat and clamp  
(locally available)



Pump with pipe screwed into the  
delivery port



Pump with pipe and union  
(locally available)

0030115EN 02/2018



## EG Series – Sewage submersible pumps

- Suitable for clean and dirty water
- Free-flow (Vortex) impeller, particularly suitable for liquids containing solids up to 50 mm grain size
- Cast iron pump casing and impeller with epoxy cataphoresis coating for enhanced corrosion protection
- Discharge port:
  - EGT: G 2" vertical upward discharge port, allowing installation in small pits without the need for an elbow on the pump
  - EGF: DN 50 horizontal discharge port
- Double shaft seal with oil chamber, separating the motor from the pumped liquid and providing additional protection against accidental dry running
- Float switch with easy adjustment to set pump start/stop levels
- Relief valve: the pump is equipped with a relief valve for air release around the impeller, ensuring proper pump priming even after long standstill periods
- Maximum connection flexibility:
  - DN50 flange
  - PN 10 – EN 1092-2
  - 4 × M8 holes on Ø 90 for duck foot coupling SA-G2"
- G 2" threaded connection – ISO 228
- Polypropylene handle with frame in stainless steel

### Technical data

- Flow: up to 33 m<sup>3</sup>/h
- Head: up to 15 m
- Motor power: 0.75 - 1.5 kW
- Minimum immersion depth: 275 mm
- Maximum immersion depth: 5 m
- Maximum solids size: 50 mm

### OPTIONS

- Silicon carbide mechanical seal version



 Pump casing and impeller with epoxy cataphoresis coating

**Cable length 10 m**

(single-phase pumps with plug)

**Easy inspection of the capacitor area**

**Ring against accidental extraction of the cable**

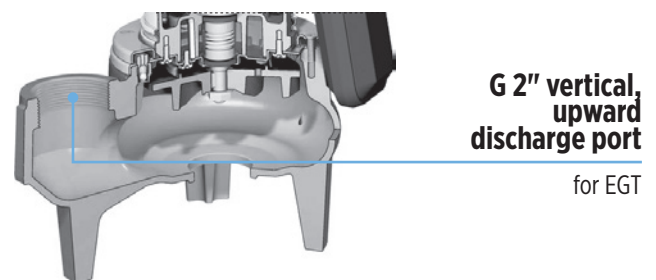
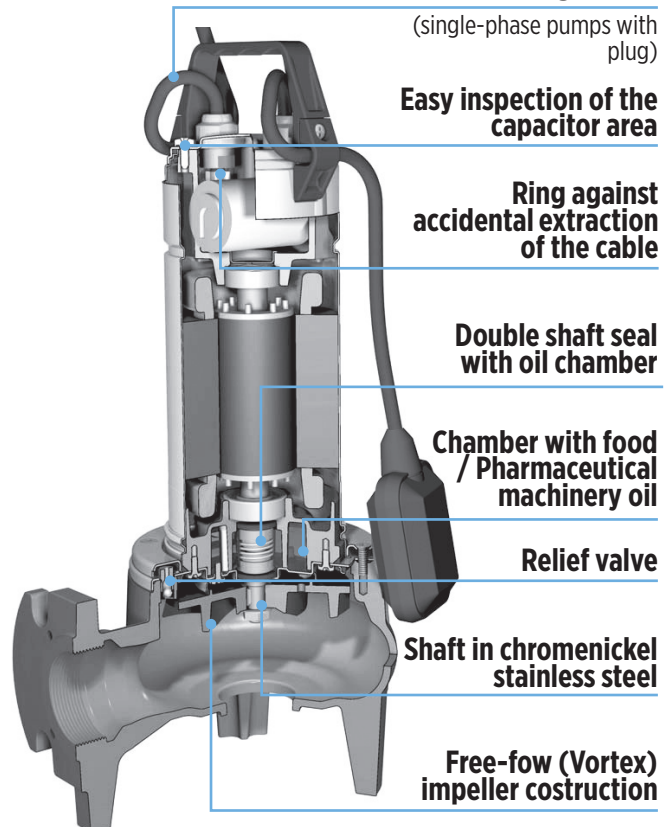
**Double shaft seal with oil chamber**

**Chamber with food / Pharmaceutical machinery oil**

**Relief valve**

**Shaft in chromenickel stainless steel**

**Free-fow (Vortex) impeller construction**



**G 2" vertical, upward discharge port**

for EGT



Draining rooms, tank drainage



Extraction of water from ponds, streams or pits and for rainwater collection



Domestic or industrial waste water, dirty water containing solids up to 50 mm grain size, for liquids which are compatible with the pump materials

# EG Series - Sewage submersible pumps

## PRODUCT IDENTIFICATION CODE

EG 7 T 400 50 F SIC

- Mechanical seal version: Silicon carbide / Silicon carbide (on request)
- Empty (without float switch); "F" (with float switch)
- Motor frequency
- Motor voltage
- Phases: "M" (Single-phase); "T" (Three-phase)
- Rated power [kWx10]
- Pump model
- EGT: with vertical threaded discharge port G 2"
- EGF: with horizontal flanged DN50 and threaded discharge port G 2"

00140022EN 02/2018

## GENERAL FEATURES

Model		EGT	EGF
Max. head		up to 15 m	
Flow [m <sup>3</sup> /h]		up to 33 m <sup>3</sup> /h	
Maximum liquid temperature [°C]		up to 35 °C	
Minimum immersion depth		275 mm	
Maximum immersion depth		5 m	
Maximum solids size		50 mm	
Power cable	Single-phase	H07RN-F, 3G1 mm <sup>2</sup> , length 10 m, with plug Cel-UnaL 47166	
	Three-phase	H07RN-F, 4G1 mm <sup>2</sup> , length 10 m, without plug	
Motor power [kW]		0.75 - 1.5 kW	
Motor type		2-pole induction motor, 50 Hz (n ≈ 2900 rpm)	
Motor standard voltage	Single-phase	230 V ± 10 %; with thermal protector	
	Three-phase	400 V ± 10 %	
Protections		Insulation class: F Protection: IPX8 (for continuous immersion) Triple impregnation humidity-proof dry winding	
Capacitor		Built-in for single phase version	
Float switch		Included in single phase version	

# EG Series - Sewage submersible pumps

HYDRAULIC PERFORMANCE 50 HZ ≈ 2900 1/MIN

Single-phase version																		
Pump model	1x230 V Capacitor			P <sub>1</sub>			P <sub>2</sub>			Q = Delivery								
										m <sup>3</sup> /h 0	3	6	9	12	15	18	21	24
	l/min 0	50	100	150	200	250	300	350	400	450	500	550						
	US GPM 0	13,2	26,4	39,6	52,8	66,0	79,3	92,5	105,7	119	132,0	145,3						
[A]	[μf]	[Vc]	[kW]	[kW]	[HP]	H = Total meters head of water column [m]												
EGT/F 7	4,8	16	450	1,1	0,75	1	9,3	8,8	8,3	7,7	7	6,2	5,3	4,3	3,2	2,2	-	-
EGT/F 9	6,6	25	450	1,45	0,9	1,2	11	10,5	10	9,3	8,6	7,8	7	6,2	5,2	4,2	1,8	-
EGT/F 11	8,4	30	450	1,8	1,1	1,5	12,8	12,2	11,6	11	10,3	9,5	8,6	7,7	6,7	5,7	3,3	2
EGT/F 15	12	35	450	2,2	1,5	2	15	14,4	13,7	13	12,2	11,3	10,4	9,5	8,5	7,4	4,5	3,5

Application range

Three-phase version																			
Pump model	3x230 V 3x400 V		P <sub>1</sub>			P <sub>2</sub>			Q = Delivery										
									m <sup>3</sup> /h 0	3	6	9	12	15	18	21	24	27	30
	l/min 0	50	100	150	200	250	300	350	400	450	500	550							
	US GPM 0	13,2	26,4	39,6	52,8	66,0	79,3	92,5	105,7	119	132,0	145,3							
[A]	[A]	[kW]	[kW]	[HP]	H = Total meters head of water column [m]														
EGT/F 7 T	3,1	1,8	1,1	0,75	1	9,3	8,8	8,3	7,7	7	6,2	5,3	4,3	3,2	2,2	-	-		
EGT/F 9 T	4	2,3	1,45	0,9	1,2	11	10,5	10	9,3	8,6	7,8	7	6,2	5,2	4,2	1,8	-		
EGT/F 11 T	5,2	3	1,8	1,1	1,5	12,8	12,2	11,6	11	10,3	9,5	8,6	7,7	6,7	5,7	3,3	2		
EGT/F 15 T	6,9	4	2,2	1,5	2	15	14,4	13,7	13	12,2	11,3	10,4	9,5	8,5	7,4	4,5	3,5		

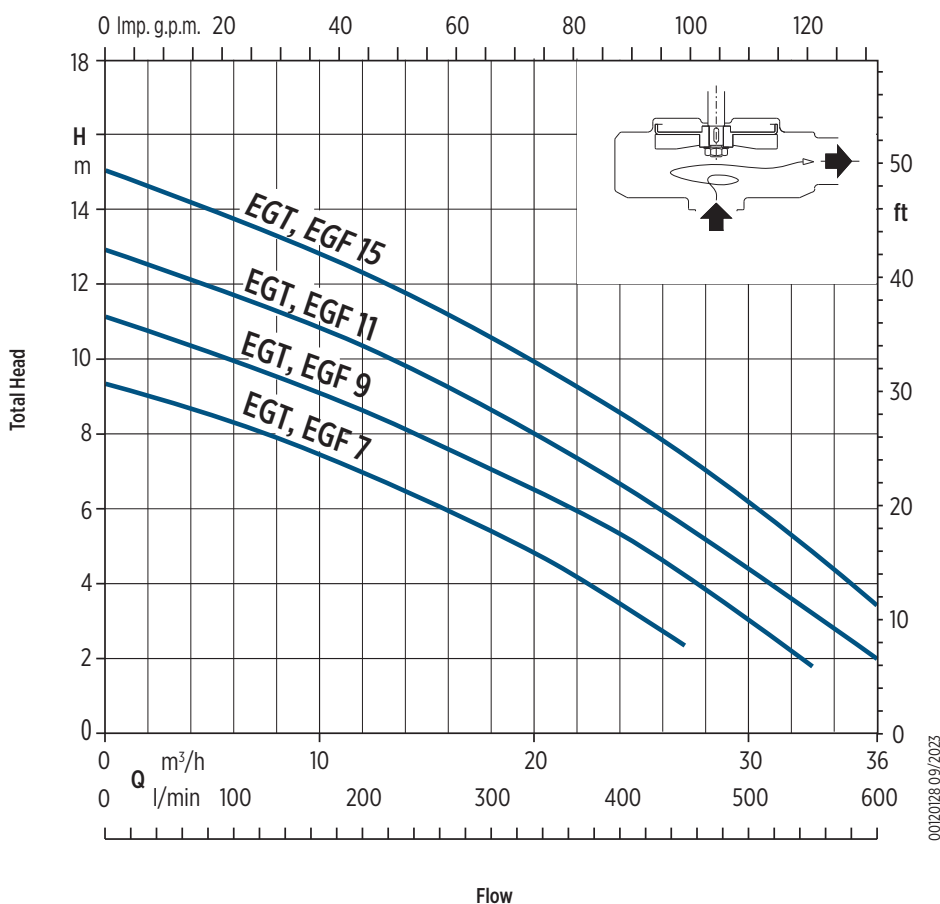
Application range

P<sub>1</sub>: Max absorbed power

P<sub>2</sub>: Motor nominal power

Density ρ = 1000 Kg/m<sup>3</sup>

Viscosity kinematic ν = max 20 mm<sup>2</sup>/sec



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# EG Series - Sewage submersible pumps

## MATERIALS

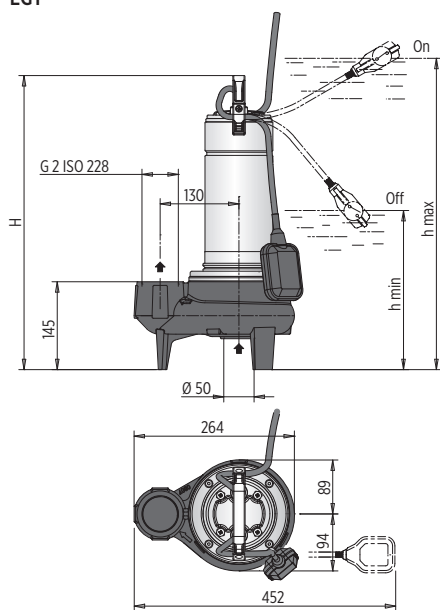
Parts description	Material	Standard	
		ASTM/AISI	DIN/EN
Pump casing / Impeller	Cast iron GJL 200	-	EN 1561
Strainer / Motor jacket / Jacket cover Casing cover / Shaft	Chrome-nickel steel	AISI 304	1.4301 / EN 10088
Handle	Polypropylene (with frame in AISI 304)	-	-
Upper mechanical seal / Lower mechanical seal	Ceramic alumina / Carbon / NBR	-	-
Seal lubrication oil	Oil for food / Pharmaceutical machinery	-	-

## DIMENSIONS

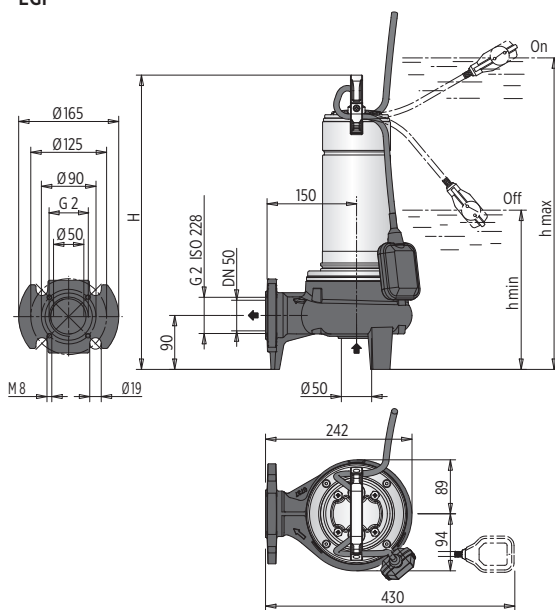
Pump model	Dimensions [mm]			Pump weight [Kg]	
	H	h max	h min	Single-phase	Three-phase
EGT 7 (T)	460	535	275	16	15
EGT 9 (T)	485	560	300	17.8	15.8
EGT 11 (T)	505	580	320	20.3	18.8
EGT 15 T	505	580	320	-	20.3
EGT 15	535	610	350	21.8	-

## DIMENSIONAL DRAWINGS

EGT



EGF

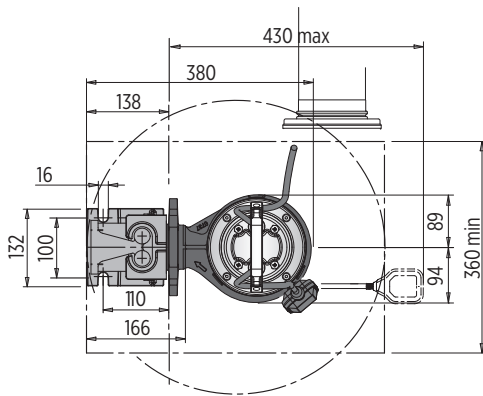
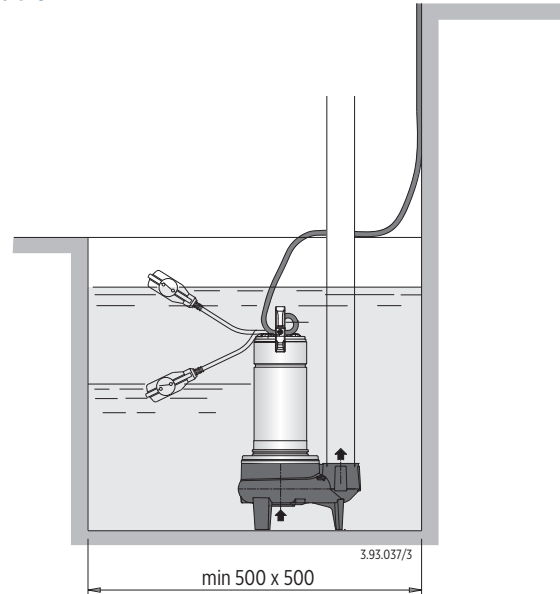
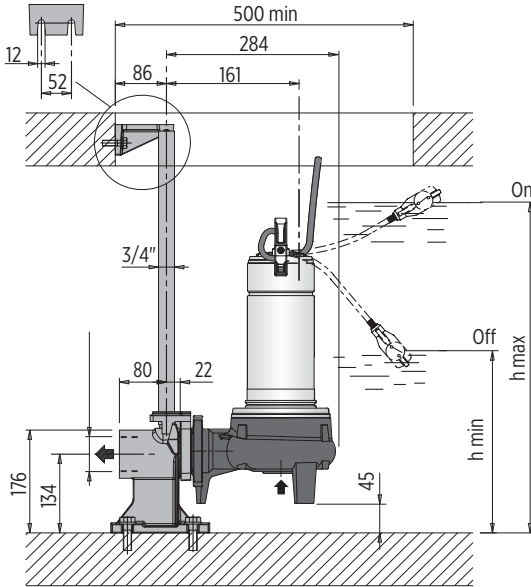


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# EG Series - Sewage submersible pumps

## INSTALLATION

### Stationary installation

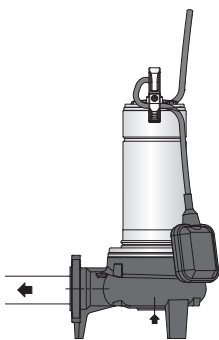


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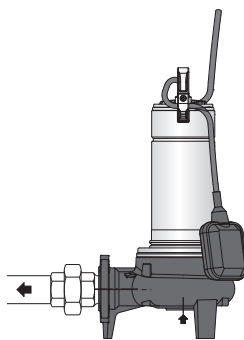
Pump model	EGT	
	Dimensions [mm]	
	h max	h min
EGT 7 (T)	535	275
EGT 9 (T)	560	300
EGT 11 (T)	580	320
EGT 15 T	580	320
EGT 15	610	350

Pump model	EGF	
	Dimensions [mm]	
	h max	h min
EGF 7 (T)	535	275
EGF 9 (T)	560	300
EGF 11 (T)	580	320
EGF 15 T	580	320
EGF 15	610	350

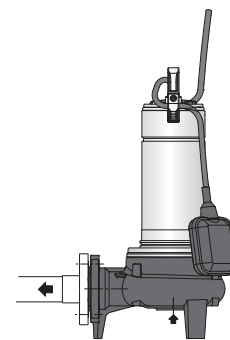
### Connection examples



Pump with threaded ports:  
pipes screwed into the ports



Pump with threaded ports:  
pipes with union couplings (locally available)



Pump with DN50 flanged ports:  
pipes with counter-flanges

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# Wastewater lift pumps 50 Hz

FWX, FWC SERIES



# FWX Series - Submersible Wastewater pumps

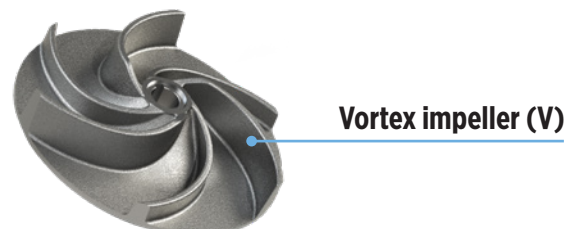
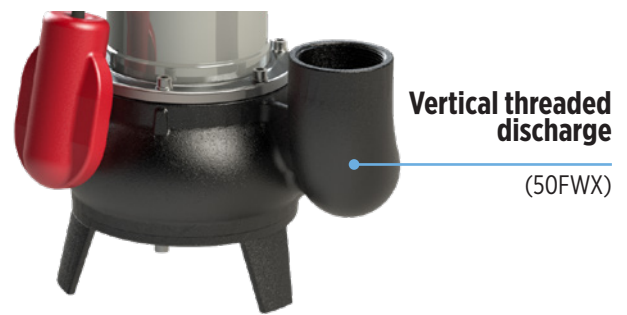
- Pump models:
  - 40FWX-V-52 (discharge Ø 40 mm)
  - 50FWX-V-52 (discharge Ø 50 mm)
- Vortex impeller (V)
- Available with or without adjustable float switch
- Double mechanical seal in oil chamber (pump side SiC/SiC)
- Dry chamber motor
- Cast iron components with cataphoresis coating for increased corrosion resistance
- Wide free passage to reduce the risk of clogging
- Quick connectors for easy maintenance
- Control box with thermal protection required for three-phase motors
- Single-phase version
- Vertical discharge port or horizontal flange
- Stainless steel handle

## Technical data

- Flow: up to 36 m<sup>3</sup>/h
- Total Head: up to 12 m
- Motor power: 0.4 - 1.1 kW
- Minimum immersion depth:
  - 317 mm (40FWX)
  - 383 mm (50FWX)
- Maximum immersion depth: 5 m
- Free passage:
  - 35 mm (40FWX)
  - 50 mm (50FWX)

## ACCESSORIES

- Hose connection
- Hose connection elbow
- Threaded elbow
- Threaded flange kit
- Storz coupling
- Coupling system
- Chain AISI316
- Shackle AISI316
- For more information about accessories see p. 92



Pumping of clear non-loaded fluids



Extraction of water from ponds, streams or pits and for rainwater collection



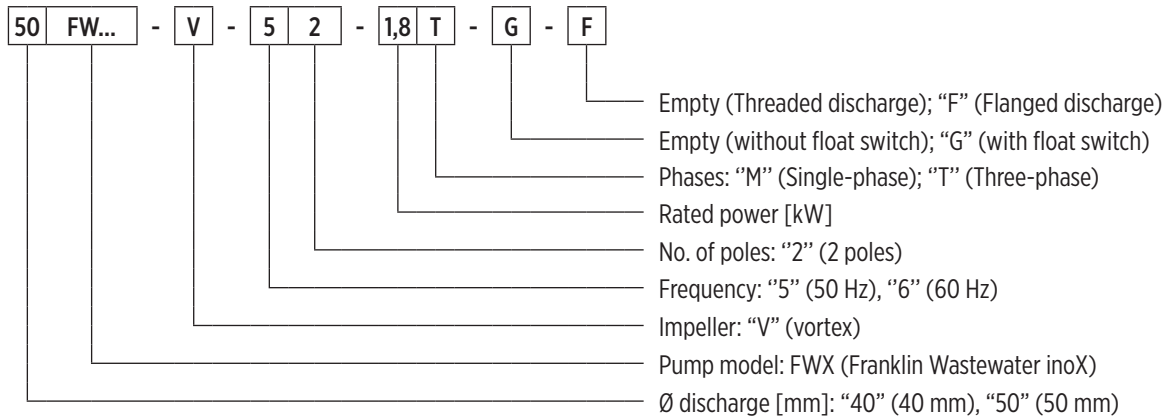
Wastewater



Drainage of flooded premises

# FWX Series - Submersible Wastewater pumps

## PRODUCT IDENTIFICATION CODE



00140110 03/2026

## GENERAL FEATURES

Materials/Constr.design		
Impeller	Cast iron EN GJL200	
External casing	Stainless steel AISI304	
Pump body	Cast iron EN GJL200 with cataphoresis coating	
Cover	Cast iron EN GJL200 with cataphoresis coating	
Mechanical seal	motor side	Graphite/Ceramic
	pump side	Silicon carbide (SiC/SiC)
Motor shaft	Stainless steel AISI416	
Power cable	Type	10 m H07RN8-F
	Single-phase	3G1mm <sup>2</sup> with SCHUKO plug (CEE 7/VII)
	Three-phase	4G1 mm <sup>2</sup>
Motor		
Constr.design	asynchronous squirrel cage-type in dry chamber	
Type	2 poles; 50 Hz	
Insulation class	F	
Protection degree	IP68	
Voltage	Single-phase	230 V ±6% built-in overheating protection, built in capacitor
	Three-phase	230V ±10%, 400V ±10%
Operating limits		
Maximum liquid temperature	+40 °C	
pH of pumped liquid	6- 10	
Liquid density	1,0 kg/dm <sup>3</sup>	
Maximum immersion depth	5 m	
Min. immersion depth for continuous service	40FWX-V-52	317 mm
	50FWX-V-52	383 mm
Free passage	40FWX-V-52	35 mm
	50FWX-V-52	50 mm
Max. number of starting/hour	20	
Construction options		

- 60 Hz version
- Different voltages
- Food-grade white oil
- External capacitor with 4G1mm<sup>2</sup> cable

# 40FWX-V-52

## HYDRAULIC PERFORMANCE 50 HZ

Pump model	Q = Delivery												
	l/sec 0	0,5	1,0	1,5	2,0	2,5	3,0	3,5	4,0	4,5	5,0	5,5	6,0
	m <sup>3</sup> /h 0	1,8	3,6	5,4	7,2	9,0	10,8	12,6	14,4	16,2	18,0	19,8	21,6
	US gpm 0	7,9	15,8	23,7	31,7	39,6	47,5	55,5	63,4	71,3	79,2	87,2	95,1
H = Total meters head of water column [m]													
40FWX-V-52-0,4	6,9	6,3	5,9	5,2	4,7	4,2	3,6	3,1	2,5	1,9			
40FWX-V-52-0,6	8,1	7,6	7	6,5	6	5,3	4,7	4,1	3,4	2,7	2,1		
40FWX-V-52-0,7	9,3	8,9	8,4	7,8	7,3	6,6	6	5,5	4,8	4,2	3,5	2,7	1,9

Application range

## TECHNICAL DATA

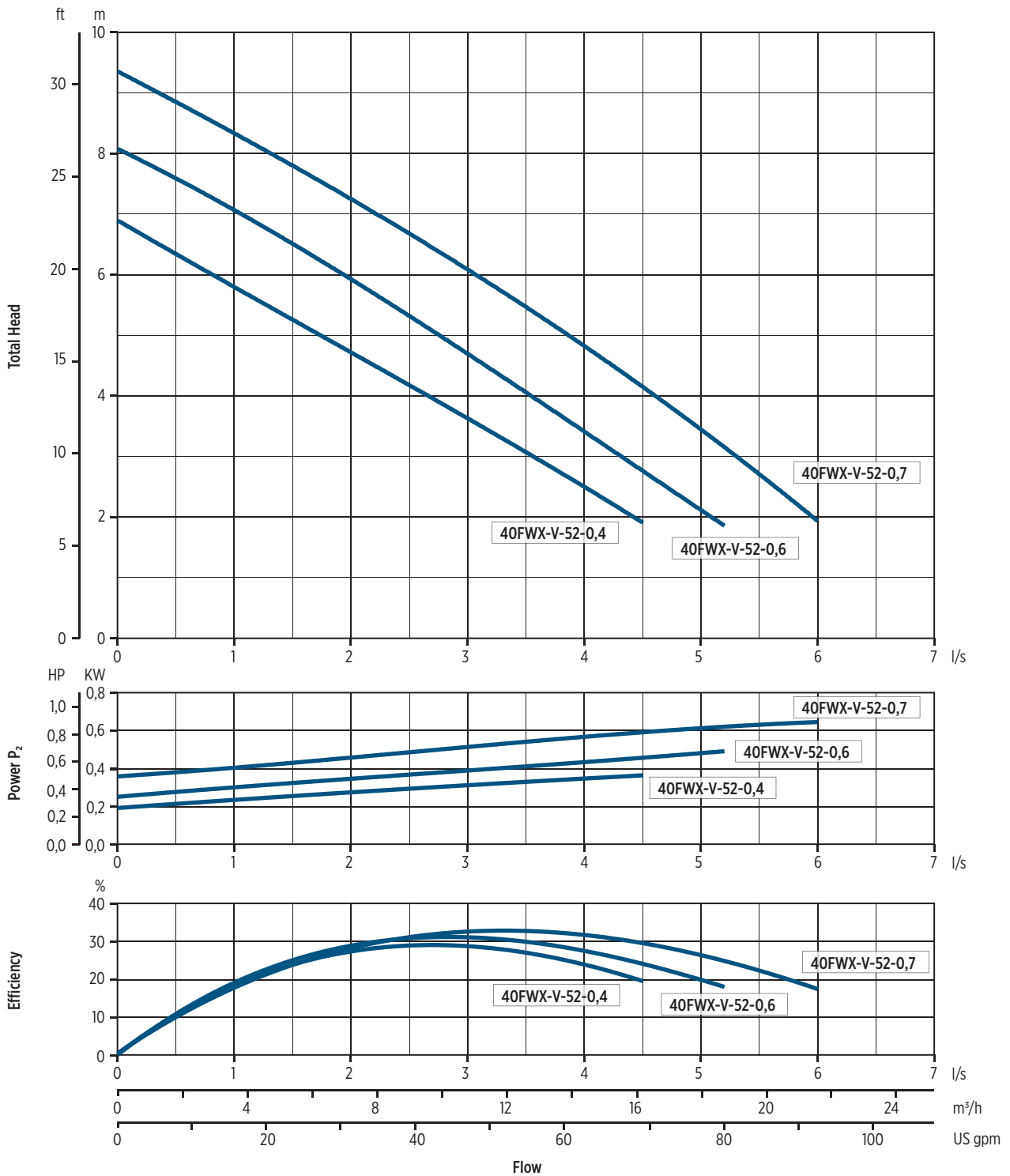
Pump model	Motor absorbed power P <sub>1</sub>	Rated power P <sub>2</sub>		Voltage [V]	Rated current [A]	Phases	Power cable		Float switch	Starting capacitor	Discharge port	Weight [kg]
	[kW]	[kW]	[HP]				Length [m]	Type		[μF]		
40FWX-V-52-0,4M	0,6	0,4	0,5	230	2,9	1 ~	10	3G1	-	10	G1½	14,3
40FWX-V-52-0,4M-G	0,6	0,4	0,5	230	2,9	1 ~	10	3G1	•	10	G1½	14,3
40FWX-V-52-0,6M	0,75	0,6	0,8	230	3,5	1 ~	10	3G1	-	10	G1½	14,3
40FWX-V-52-0,6M-G	0,75	0,6	0,8	230	3,5	1 ~	10	3G1	•	10	G1½	14,3
40FWX-V-52-0,7M	0,94	0,7	0,95	230	4,4	1 ~	10	3G1	-	16	G1½	15,5
40FWX-V-52-0,7M-G	0,94	0,7	0,95	230	4,4	1 ~	10	3G1	•	16	G1½	15,5
40FWX-V-52-0,7T	0,94	0,7	0,95	400	1,7	3 ~	10	4G1	-	-	G1½	15,5
40FWX-V-52-0,7T-G	0,94	0,7	0,95	400	1,7	3 ~	10	4G1	•	-	G1½	15,5

"-" = not available

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# 40FWX-V-52

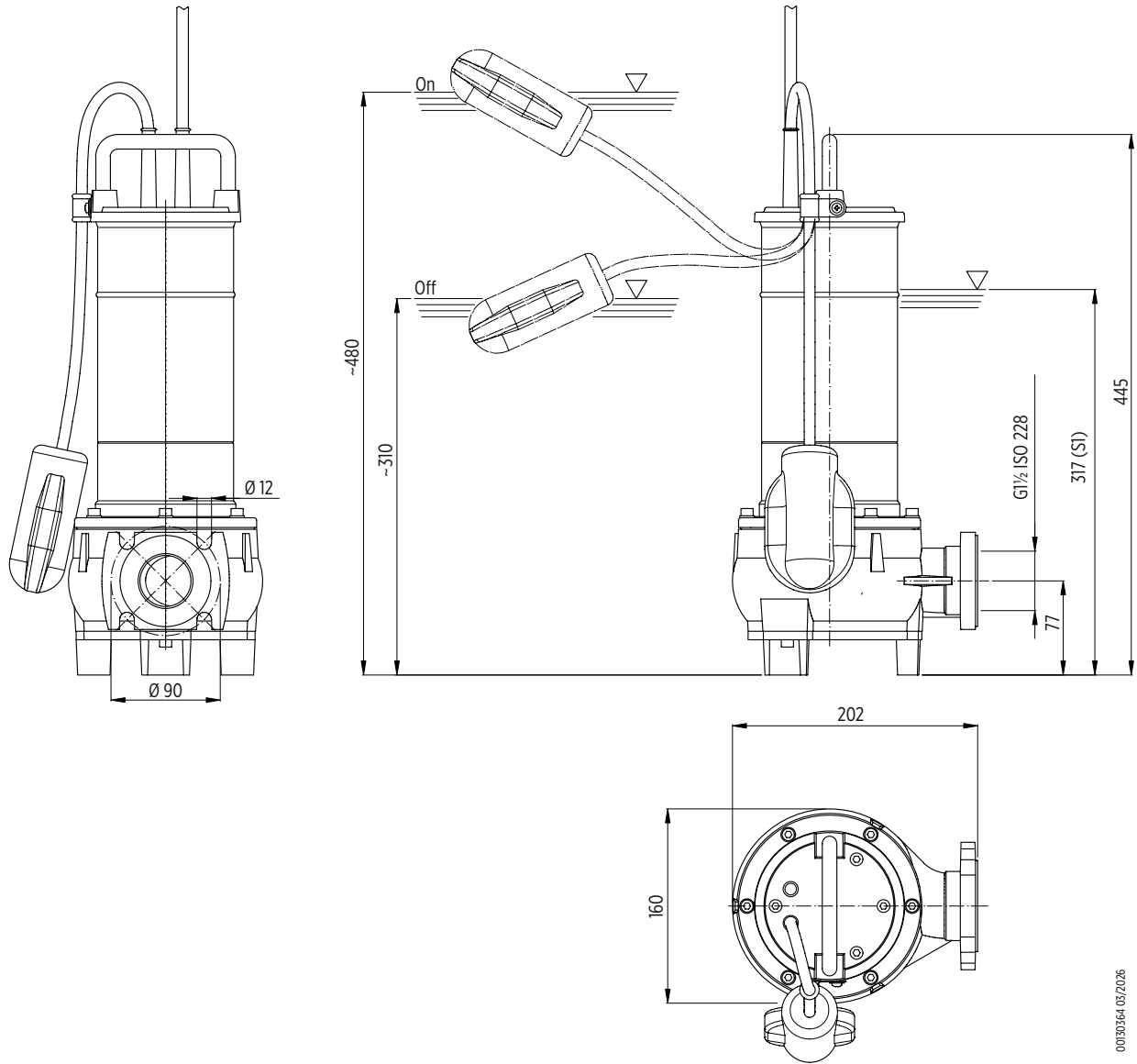
## PERFORMANCE CURVES AT 50 HZ



0012019/03/2016

# 40FWX-V-52

## DIMENSIONS



0030364 03/2026

Package		
Pump model	Dimensions [mm]	Weight [kg]
40FWX-V-52-0,4	225x180x560	14,8
40FWX-V-52-0,6		
40FWX-V-52-0,7		16

Pallet			
Pump model	Dimensions [mm]	N° of pumps	Weight [kg]
40FWX-V-52-0,4	1200x800x700	22	340
40FWX-V-52-0,6			
40FWX-V-52-0,7			370

# 40FWX-V-52

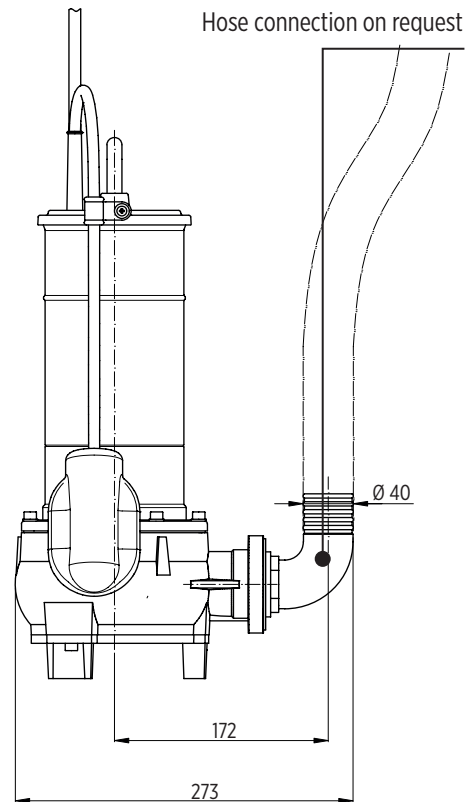
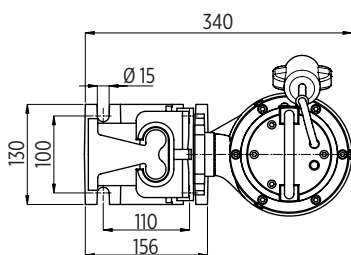
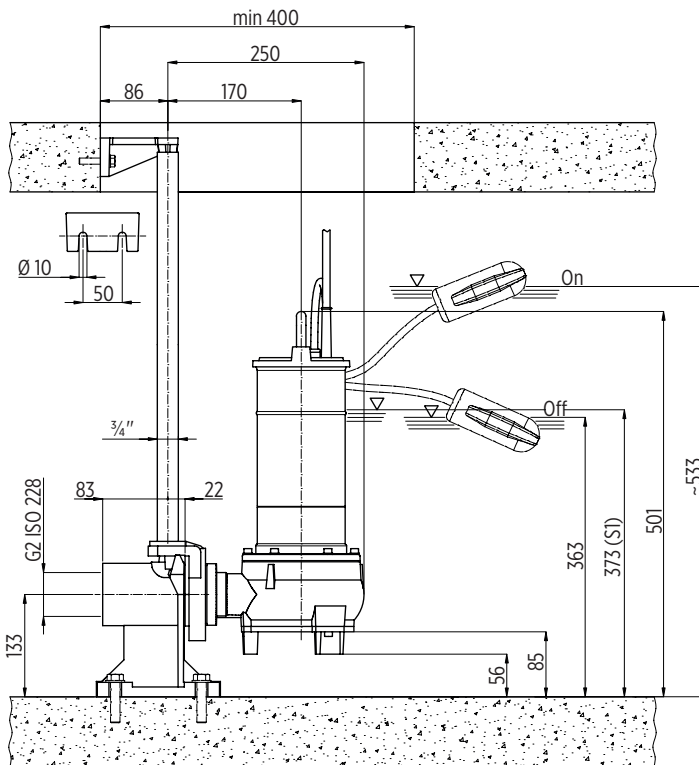
## INSTALLATION

### 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.

### Transportable installation

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



9202/310 59630300

# 50FWX-V-52

## HYDRAULIC PERFORMANCE 50 HZ

Pump model	Q = Delivery														
	l/sec 0	1,0	1,5	2,0	2,5	3,0	3,5	4,0	4,5	5,0	6,0	7,0	8,0	9,0	10,0
	m <sup>3</sup> /h 0	3,6	5,4	7,2	9,0	10,8	12,6	14,4	16,2	18,0	21,6	25,2	28,8	32,4	36,0
US gpm 0	15,8	23,7	31,7	39,6	47,5	55,5	63,4	71,3	79,2	95,1	110,9	126,8	142,6	158,5	
H = Total meters head of water column [m]															
50FWX-V-52-0,9	11,1	10,3	9,9	9,5	8,9	8,4	8	7,5	7,1	6,5	5,4	4,2	2,7	1,5	
50FWX-V-52-1,4	12,2	11,5	11	10,6	10,1	9,6	9,2	8,7	8,2	7,7	6,6	5,3	3,9	2,6	1,4

Application range

## TECHNICAL DATA

Pump model	Motor absorbed power P <sub>1</sub>	Rated power P <sub>2</sub>		Voltage	Rated current	Phases	Power cable		Float switch	Starting capacitor	Discharge port	Weight [kg]
	[kW]	[kW]	[HP]	[V]	[A]		Length [m]	Type		[μF]		
50FWX-V-52-0,9M	1,35	0,9	1,2	230	6,3	1 ~	10	3G1	-	20	G2	18
50FWX-V-52-0,9M-G	1,35	0,9	1,2	230	6,3	1 ~	10	3G1	•	20	G2	18
50FWX-V-52-0,9M-F	1,35	0,9	1,2	230	6,3	1 ~	10	3G1	-	20	Ø50	18
50FWX-V-52-0,9M-G-F	1,35	0,9	1,2	230	6,3	1 ~	10	3G1	•	20	Ø50	18
50FWX-V-52-0,9T	1,35	0,9	1,2	400	2,1	3 ~	10	4G1	-	-	G2	18
50FWX-V-52-0,9T-G	1,35	0,9	1,2	400	2,1	3 ~	10	4G1	•	-	G2	18
50FWX-V-52-0,9T-F	1,35	0,9	1,2	400	2,1	3 ~	10	4G1	-	-	Ø50	18
50FWX-V-52-0,9T-G-F	1,35	0,9	1,2	400	2,1	3 ~	10	4G1	•	-	Ø50	18
50FWX-V-52-1,1M	1,5	1,1	1,9	230	7,1	1 ~	10	3G1	-	25	G2	19
50FWX-V-52-1,1M-G	1,5	1,1	1,9	230	7,1	1 ~	10	3G1	•	25	G2	19
50FWX-V-52-1,1M-F	1,5	1,1	1,9	230	7,1	1 ~	10	3G1	-	25	Ø50	19
50FWX-V-52-1,1M-G-F	1,5	1,1	1,9	230	7,1	1 ~	10	3G1	•	25	Ø50	19
50FWX-V-52-1,1T	1,5	1,1	1,9	400	3,0	3 ~	10	4G1	-	-	G2	19
50FWX-V-52-1,1T-F	1,5	1,1	1,9	400	3,0	3 ~	10	4G1	-	-	Ø50	19

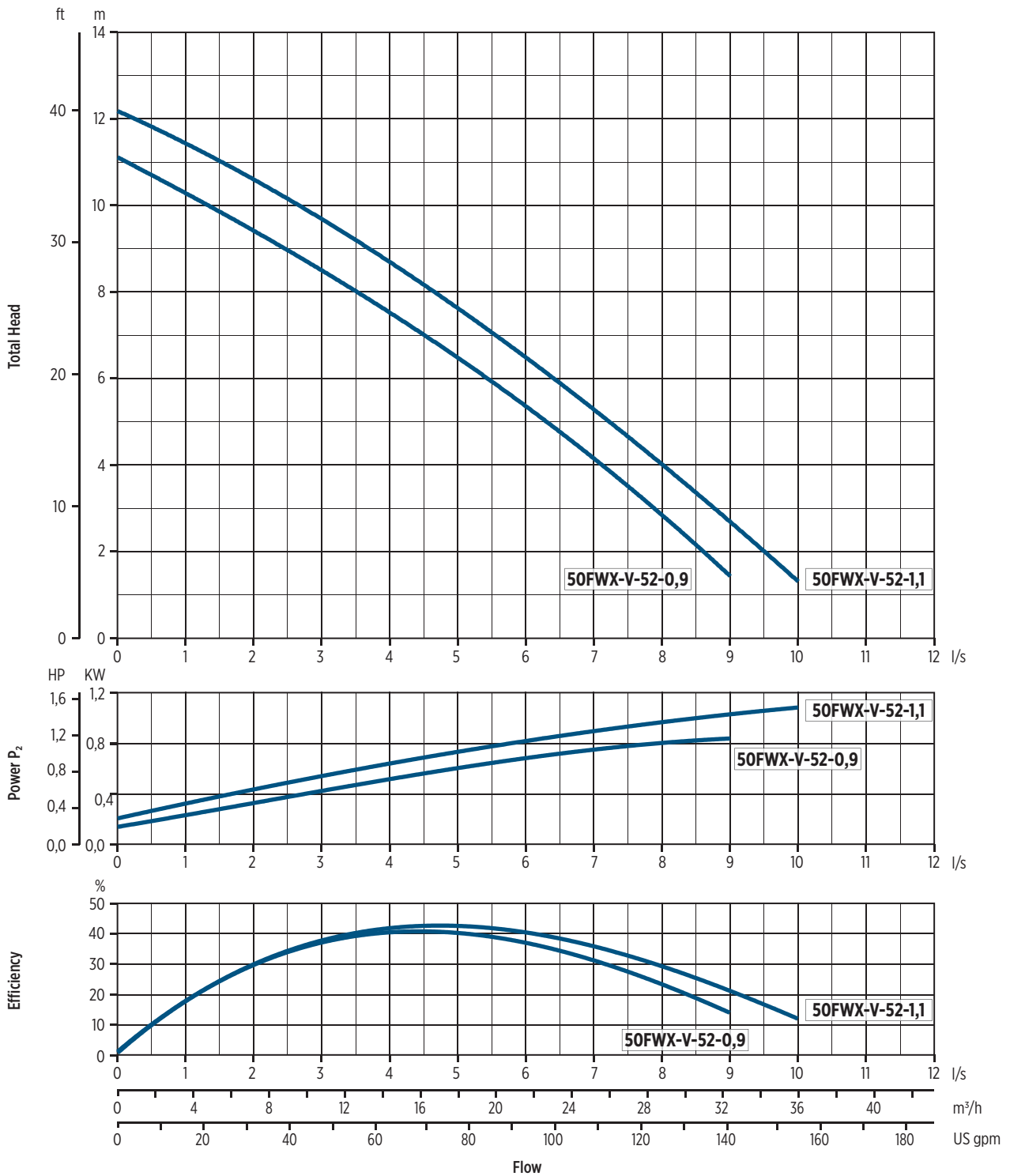
"-" = not available

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# 50FWX-V-52

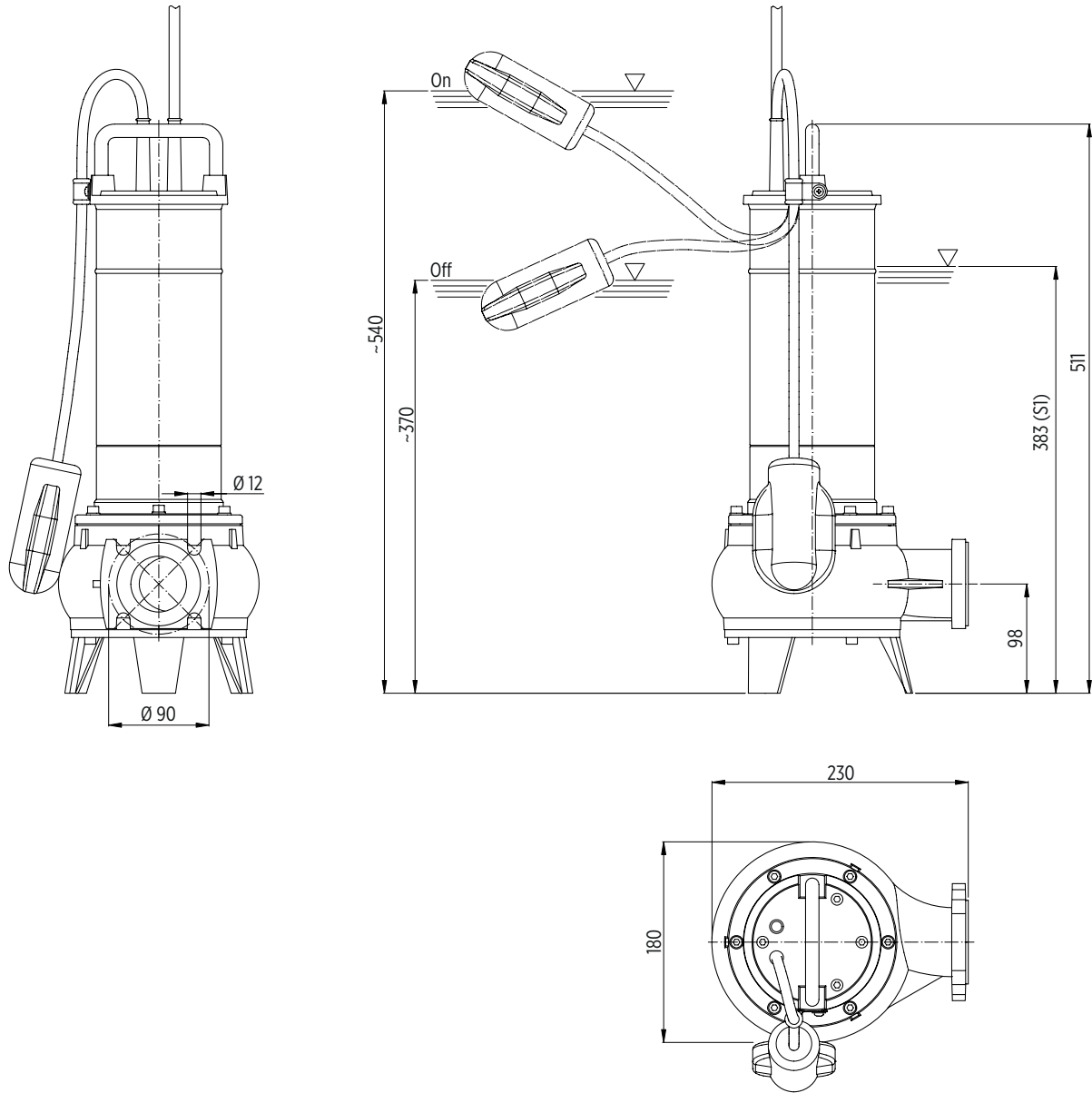
## PERFORMANCE CURVES AT 50 HZ



0010320/05/2016

# 50FWX-V-52

## DIMENSIONS



00130366-03/2026

Package		
Pump model	Dimensions [mm]	Weight [kg]
50FWX-V-52-0,9	255x225x560	18,7
50FWX-V-52-1,1		19,7

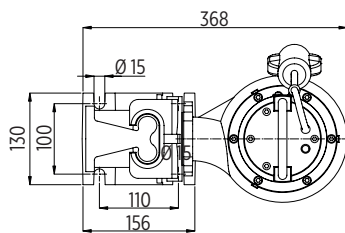
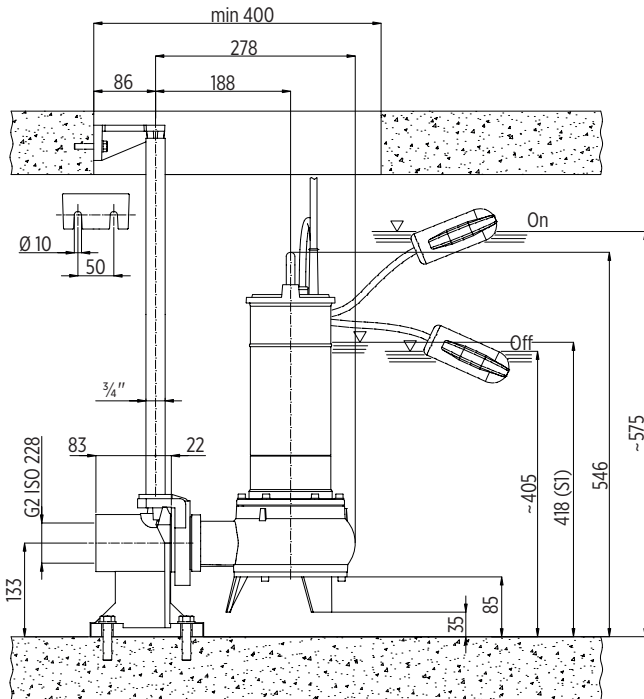
Pallet			
Pump model	Dimensions [mm]	N° of pumps	Weight [kg]
50FWX-V-52-0,9	1200x800x700	15	300
50FWX-V-52-1,1			310

# 50FWX-V-52

## INSTALLATION

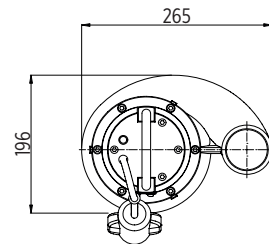
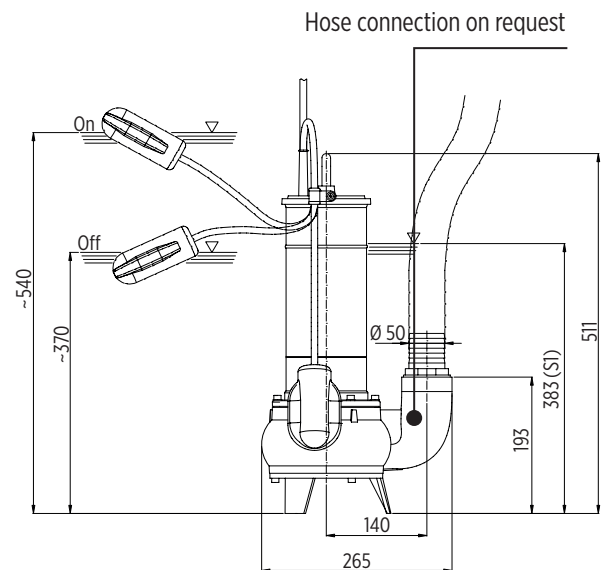
### Permanent installation with coupling system

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.



### Transportable installation

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



0030367 03/2026

## 50FWC Series – Submersible Wastewater pumps

- Pump models – discharge Ø 50 mm:
  - 50FWC-V-52 (Vortex impeller, 2 poles motor)
  - 50FWC-V-54 (Vortex impeller, 4 poles motor)
  - 50FWC-M-52 (Single channel impeller, 2 poles motor)
- Impeller type: Vortex (V) or single-channel (M)
- Available with or without adjustable float switch
- Sic/Sic mechanical seal
- Fully cast iron construction
- Single-phase versions up to 1.1 kW with built-in thermal protector
- Single-phase version with external capacitor
- Stainless steel handle
- Wide range of accessories available



✓ **Cast iron construction**  
to withstand harsh conditions

**Cable length 10 m**  
(single-phase pumps with plug)

**2 or 4 poles motor**

**Sic/Sic mechanical seal**  
to withstand abrasive fluid

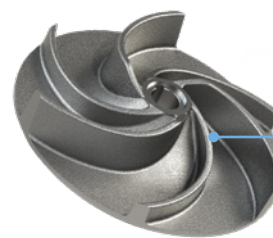
**Elbow G2"**  
included in the package

### Technical data

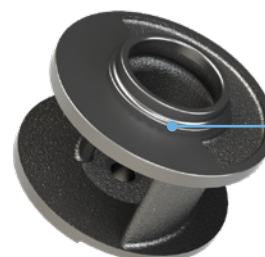
- Flow: up to 50.4 m<sup>3</sup>/h
- Total Head: up to 24 m
- Motor power: 0.9 -1.6 kW
- Minimum immersion depth:
  - 353 mm (50FWC-V-52-0,9M/T, 50FWC-V-52-1,1M/T, 50FWC-M-52-0,9M/T, 50FWC-M-52-1,1M/T, 50FWC-V-54-0,75M/T)
  - 380 mm (50FWC-V-52-1,6M/T, 50FWC-M-52-1,6M/T, 50FWC-M-52-1,6T-HH, 50FWC-V-54-1,1M/T)
- Maximum immersion depth: 5 m
- Free passage:
  - 40 mm (50FWC-V-52-0,9M/T, 50FWC-V-52-1,1M/T, 50FWC-M-52-0,9M/T, 50FWC-M-52-1,1M/T, 50FWC-V-54-0,75M/T)
  - 50 mm (50FWC-V-52-1,6M/T, 50FWC-M-52-1,6M/T, 50FWC-M-52-1,6T-HH, 50FWC-V-54-1,1M/T)

### ACCESSORIES

- Hose connection
- Threaded elbow (included)
- Threaded flange kit
- Competitor replacement adapter
- Storz coupling
- Coupling system
- Chain AISI316
- Shackle AISI316
- Sacrificial anodes belt
- For more information about accessories see p. 92



**Vortex impeller (V)**  
for a wide passage



**Single channel impeller (M)**  
for high head



Pumping of clear non-loaded fluids



Extraction of water from ponds, streams or pits and for rainwater collection



Pumping of industrial sewage, screened wastewater and sludge

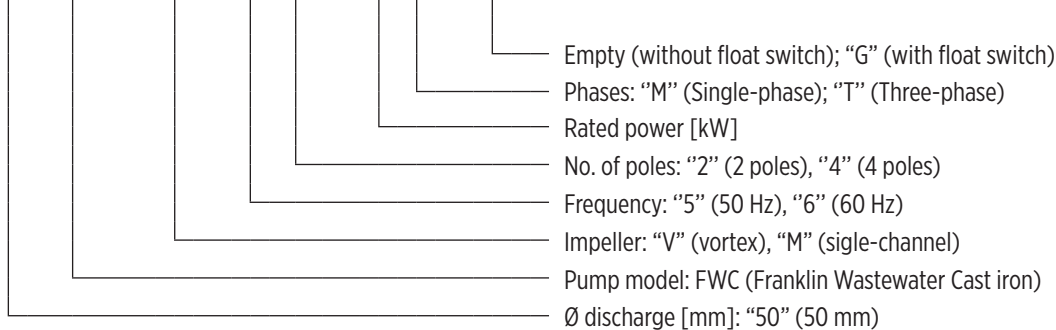


Lift and pumping stations

# 50FWC Series – Submersible Wastewater pumps

## PRODUCT IDENTIFICATION CODE

50 FW... - V - 5 2 - 1,8 T - G



00H0086 05/2016

## GENERAL FEATURES

		Materials/Constr.design
Impeller		Cast iron EN GJL200
External casing		Cast iron EN GJL200
Pump body		Cast iron EN GJL200
Cover		Cast iron EN GJL200
Mechanical seal		SIC/SIC
Motor shaft		Stainless steel AISI416
Power cable	Type	10 m H07RN8-F
	Single-phase	4G1,5mm <sup>2</sup> , capacitor box and SCHUKO plug (CEE 7/VII)
	Single-phase 50FWC-V-52-1,6M, 50FWC-M-52-1,6M	4G2,5mm <sup>2</sup> , capacitor box and SCHUKO plug (CEE 7/VII)
	Three-phase	4G1,5mm <sup>2</sup>
		Motor
Constr.design		asynchronous squirrel cage-type in oil chamber
Type	50FWC-V-52, 50FWC-M-52	2 poles; 50 Hz
	50FWC-V-54	4 poles; 50 Hz
Insulation class		F
Protection degree		IP68
Voltage	Single-phase	230V ±6% built-in overheating protection (up to 1,1 kW), capacitor box and SCHUKO plug (CEE 7/VII)
	Three-phase	230V ±10%, 400V ±10%
		Operating limits
Maximum liquid temperature		+40 °C
pH of pumped liquid		6- 10
Liquid density		1,0 kg/dm <sup>3</sup>
Maximum immersion depth		5 m
Min. immersion depth for continuous service	50FWC-V-52-0,9M/T, 50FWC-V-52-1,1M/T 50FWC-M-52-0,9M/T, 50FWC-M-52-1,1M/T 50FWC-V-54-0,75M/T	353 mm
	50FWC-V-52-1,6M/T 50FWC-M-52-1,6M/T, 50FWC-M-52-1,6T-HH 50FWC-V-54-1,1M/T	380 mm
Free passage	50FWC-V-52-0,9M/T, 50FWC-V-52-1,1M/T 50FWC-M-52-0,9M/T, 50FWC-M-52-1,1M/T 50FWC-V-54-0,75M/T	40 mm
	50FWC-V-52-1,6M/T 50FWC-M-52-1,6M/T, 50FWC-M-52-1,6T-HH 50FWC-V-54-1,1M/T	50 mm
Max. number of starting/hour		20
		Construction options

- 60 Hz version
- Different voltages
- Food-grade white oil

# 50FWC-V-52

## HYDRAULIC PERFORMANCE 50 HZ

Pump model	Q = Delivery										
	l/sec 0	1	2	3	4	5	6	7	8	9	10
	m <sup>3</sup> /h 0	3,6	7,2	10,8	14,4	18	21,6	25,2	28,8	32,4	36
	US gpm 0	15,8	31,7	47,5	63,4	79,2	92,1	110,9	126,8	142,6	158,5
	H = Total meters head of water column [m]										
50FWC-V-52-0,9	12,2	11	9,8	8,5	7,4	6	4,3	2,3			
50FWC-V-52-1,1	13	12	11	9,5	8,3	7	5,7	4,4	3	1,6	
50FWC-V-52-1,6	14	12,5	11,5	10,5	9,6	8,7	7,8	6,8	5,5	4	2,1

Application range

## TECHNICAL DATA

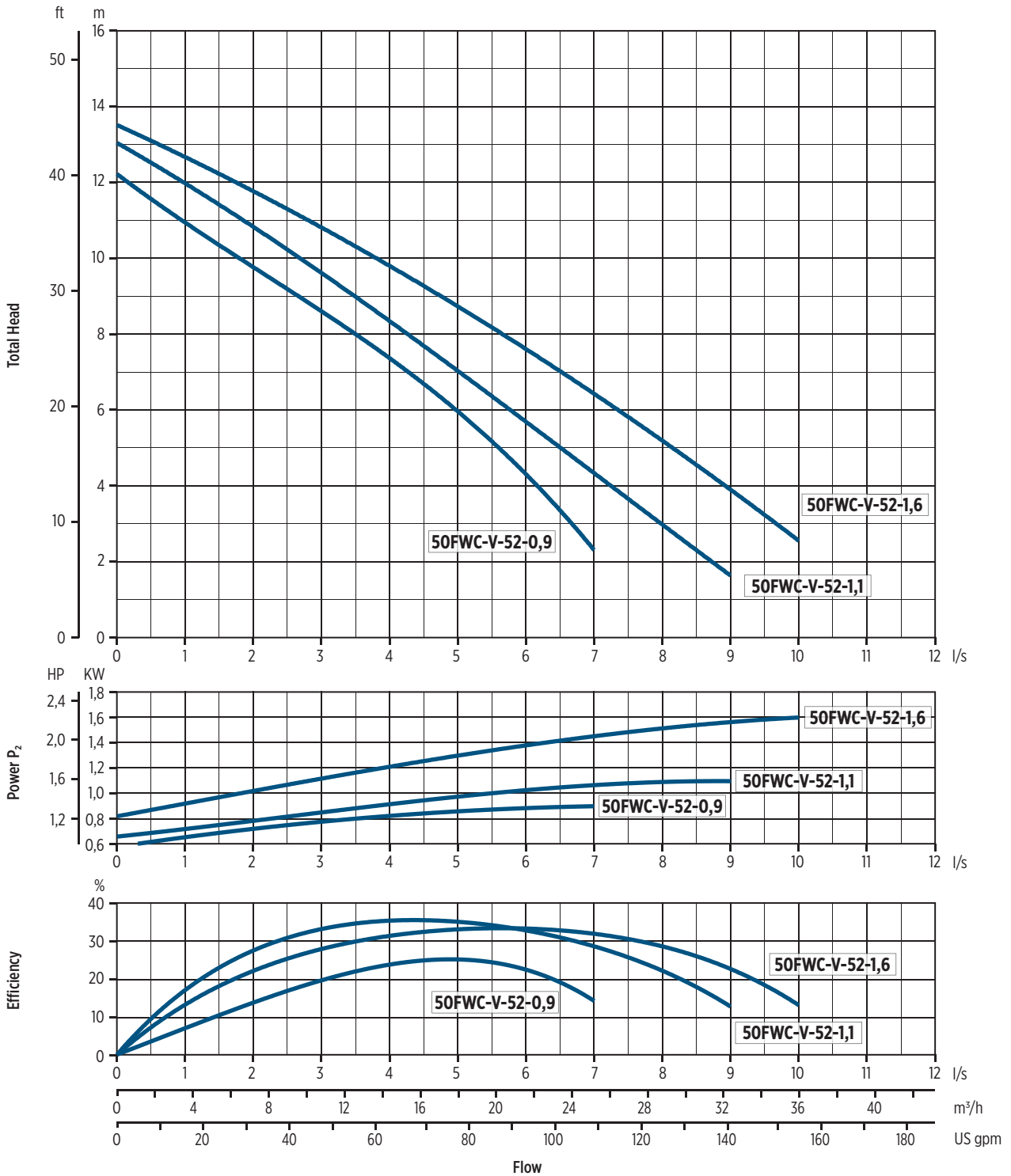
Pump model	Motor absorbed power P <sub>1</sub>	Rated power P <sub>2</sub>		Voltage [V]	Rated current [A]	Phases	Power cable		Float switch	Starting capacitor	Discharge port	Weight [kg]
	[kW]	[kW]	[HP]				Length [m]	Type		[μF]		
50FWC-V-52-0,9M	1,3	0,9	1,2	230	5,8	1 -	10	4G1,5	-	25	G2 (Ø50)	29
50FWC-V-52-0,9M-G	1,3	0,9	1,2	230	5,8	1 -	10	4G1,5	•	25	G2 (Ø50)	29
50FWC-V-52-0,9T	1,3	0,9	1,2	400	2	3 -	10	4G1,5	-	-	G2 (Ø50)	29
50FWC-V-52-0,9T-G	1,3	0,9	1,2	400	2	3 -	10	4G1,5	•	-	G2 (Ø50)	29
50FWC-V-52-1,1M	1,7	1,1	1,5	230	7	1 -	10	4G1,5	-	30	G2 (Ø50)	29
50FWC-V-52-1,1M-G	1,7	1,1	1,5	230	7	1 -	10	4G1,5	•	30	G2 (Ø50)	29
50FWC-V-52-1,1T	1,7	1,1	1,5	400	3	3 -	10	4G1,5	-	-	G2 (Ø50)	29
50FWC-V-52-1,1T-G	1,7	1,1	1,5	400	3	3 -	10	4G1,5	•	-	G2 (Ø50)	29
50FWC-V-52-1,6M	2,3	1,6	2,1	230	9,1	1 -	10	4G2,5	-	40	G2 (Ø50)	35
50FWC-V-52-1,6M-G	2,3	1,6	2,1	230	9,1	1 -	10	4G2,5	•	40	G2 (Ø50)	35
50FWC-V-52-1,6T	2,3	1,6	2,1	400	4	3 -	10	4G1,5	-	-	G2 (Ø50)	35
50FWC-V-52-1,6T-G	2,3	1,6	2,1	400	4	3 -	10	4G1,5	•	-	G2 (Ø50)	35

"-" = not available

• = available

# 50FWC-V-52

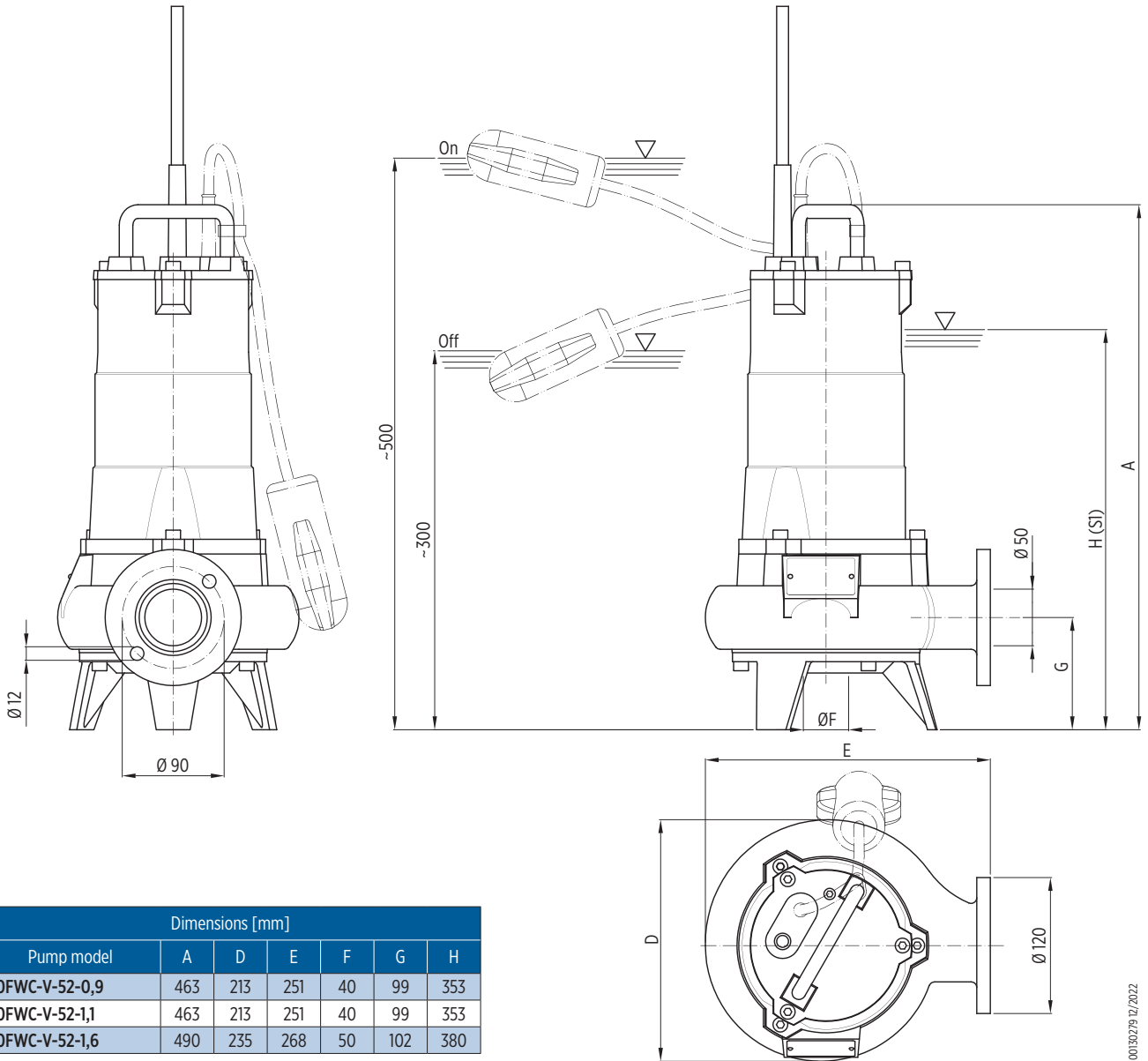
## PERFORMANCE CURVES AT 50 HZ



0020095 12/2022

# 50FWC-V-52

## DIMENSIONS



Dimensions [mm]						
Pump model	A	D	E	F	G	H
50FWC-V-52-0,9	463	213	251	40	99	353
50FWC-V-52-1,1	463	213	251	40	99	353
50FWC-V-52-1,6	490	235	268	50	102	380

Package		
Pump model	Dimensions [mm]	Weight [kg]
50FWC-V-52-0,9	290x245x585	30
50FWC-V-52-1,1		
50FWC-V-52-1,6	300x260x585	36

00130279 12/2022

# 50FWC-V-52

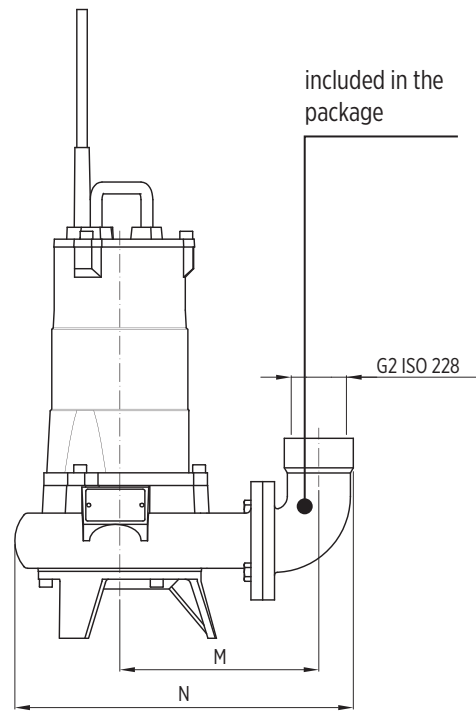
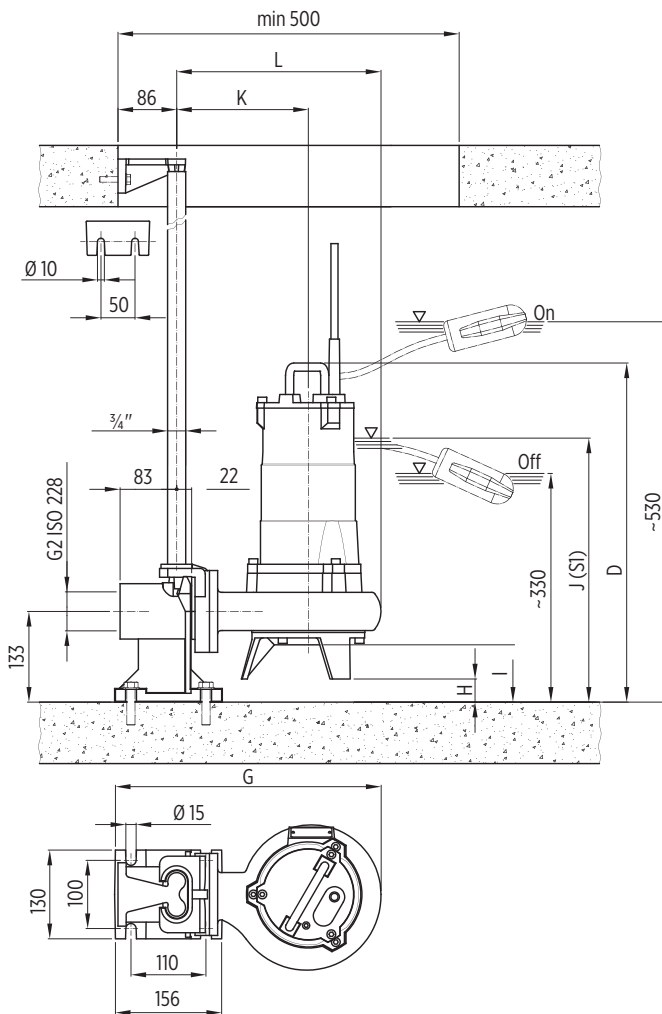
## INSTALLATION

### 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.

### Transportable installation

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



00130279/12/2022

Installation dimensions [mm]

Pump model	D	G	H	I	J	K	L	M	N
50FWC-V-52-0,9	497	390	34	84	387	193	300	202	344
50FWC-V-52-1,1	497	390	34	84	387	193	300	202	344
50FWC-V-52-1,6	521	407	31	81	414	200	316	209	360

# 50FWC-V-54

## HYDRAULIC PERFORMANCE 50 HZ

Pump model	Q = Delivery											
	l/sec 0	1	2	3	4	5	6	7	8	9	10	11
	m <sup>3</sup> /h 0	3,6	7,2	10,8	14,4	18	21,6	25,2	28,8	32,4	36	39,6
	US gpm 0	15,8	31,7	47,5	63,4	79,2	92,1	110,9	126,8	142,6	158,5	174,3
H = Total meters head of water column [m]												
50FWC-V-54-0,75	6,4	6,2	5,8	5,3	4,6	3,8	2,8	1,8				
50FWC-V-54-1,1	7,4	7	6,6	6,2	5,8	5,4	4,9	4,4	3,9	3,3	2,5	1,6

Application range

## TECHNICAL DATA

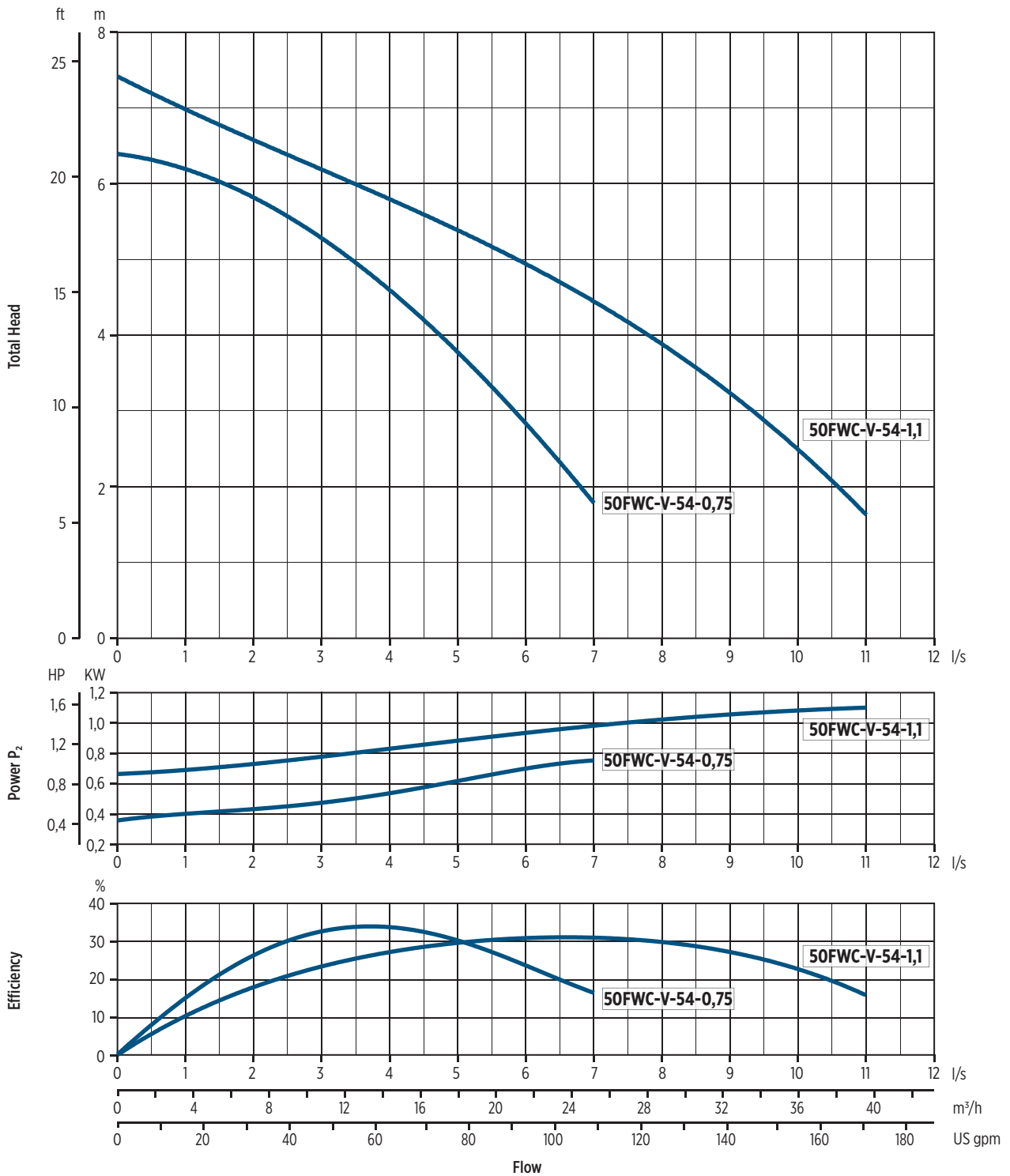
Pump model	Motor absorbed power P <sub>1</sub>	Rated power P <sub>2</sub>		Voltage [V]	Rated current [A]	Phases	Power cable		Float switch	Starting capacitor [μF]	Discharge port	Weight [kg]
	[kW]	[kW]	[HP]				Length [m]	Type				
50FWC-V-54-0,75M	1,2	0,75	1	230	5	1 ~	10	4G1,5	-	14	G2 (Ø50)	29
50FWC-V-54-0,75M-G	1,2	0,75	1	230	5	1 ~	10	4G1,5	•	14	G2 (Ø50)	29
50FWC-V-54-0,75T	1,2	0,75	1	400	1,9	3 ~	10	4G1,5	-	-	G2 (Ø50)	29
50FWC-V-54-0,75T-G	1,2	0,75	1	400	1,9	3 ~	10	4G1,5	•	-	G2 (Ø50)	29
50FWC-V-54-1,1M	1,5	1,1	1,5	230	7,7	1 ~	10	4G1,5	-	20	G2 (Ø50)	33
50FWC-V-54-1,1M-G	1,5	1,1	1,5	230	7,7	1 ~	10	4G1,5	•	20	G2 (Ø50)	33
50FWC-V-54-1,1T	1,5	1,1	1,5	400	2,8	3 ~	10	4G1,5	-	-	G2 (Ø50)	33
50FWC-V-54-1,1T-G	1,5	1,1	1,5	400	2,8	3 ~	10	4G1,5	•	-	G2 (Ø50)	33

"-" = not available

• = available

# 50FWC-V-54

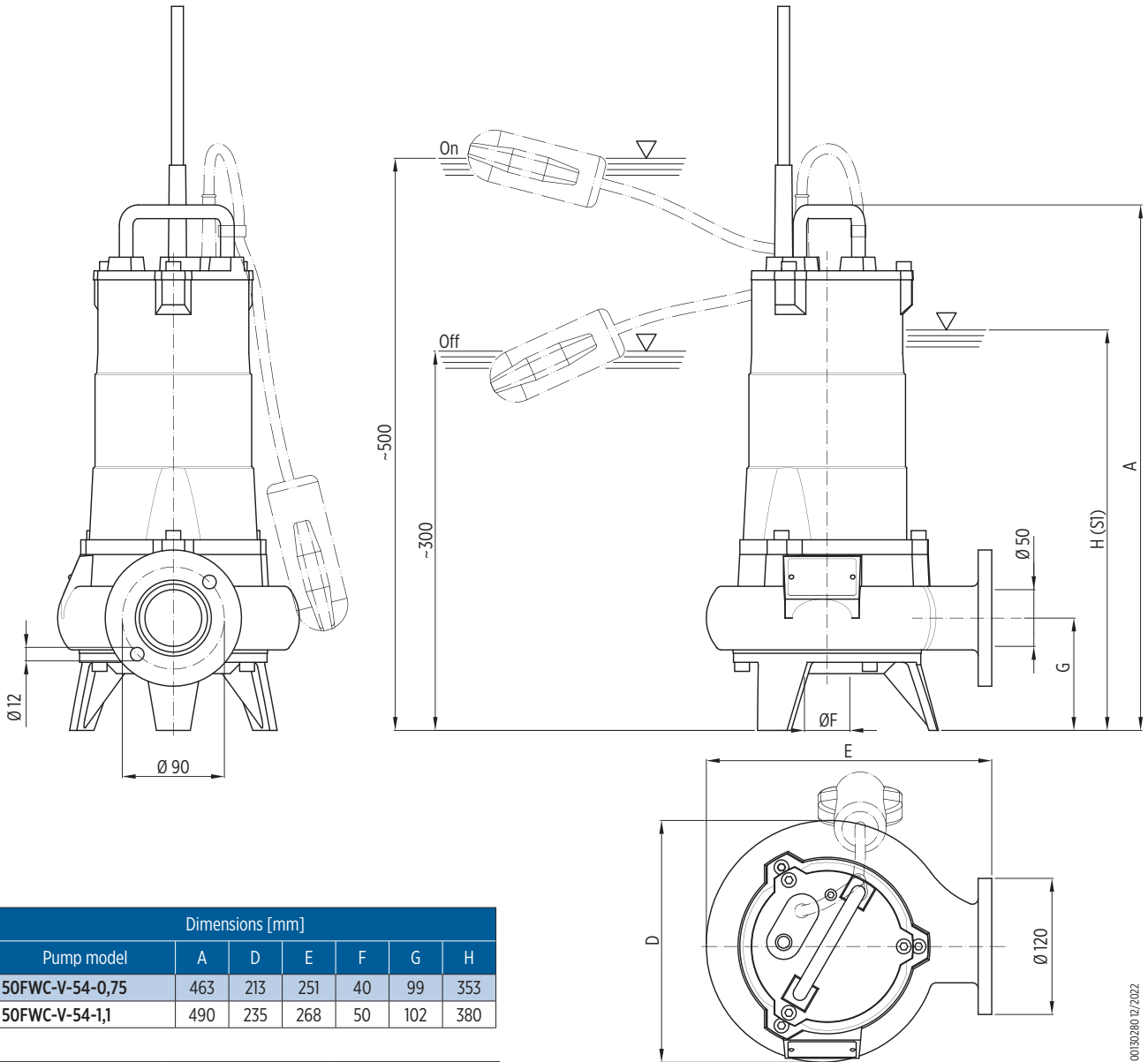
## PERFORMANCE CURVES AT 50 HZ



0070096 05/2023

# 50FWC-V-54

## DIMENSIONS



00130280.12/2022

Dimensions [mm]						
Pump model	A	D	E	F	G	H
50FWC-V-54-0,75	463	213	251	40	99	353
50FWC-V-54-1,1	490	235	268	50	102	380

Package		
Pump model	Dimensions [mm]	Weight [kg]
50FWC-V-54-0,75	290x245x585	30
50FWC-V-54-1,1	300x260x585	34



# 50FWC-M-52

## HYDRAULIC PERFORMANCE 50 HZ

Pump model	Q = Delivery													
	l/sec 0	1	2	3	4	5	6	7	8	9	10	12	13	14
	m <sup>3</sup> /h 0	3,6	7,2	10,8	14,4	18	21,6	25,2	28,8	32,4	36	43,2	46,8	50,4
	US gpm 0	15,8	31,7	47,5	63,4	79,2	92,1	110,9	126,8	142,6	158,5	190,2	206	221,9
H = Total meters head of water column [m]														
50FWC-M-52-0,9	15,5	12,5	11	9,5	8,3	7	5,6	4,1	2,5					
50FWC-M-52-1,1	17,5	15	13,5	12	10,5	9,4	8	6,5	5	3,4	1,7			
50FWC-M-52-1,6	19	17	15,5	14	13	12	11	10	9,4	8,6	7,7	5,8	4,2	2,5
50FWC-M-52-1,6-HH	24	22	20,5	19	17,5	16,5	15,2	14	13					

Application range

## TECHNICAL DATA

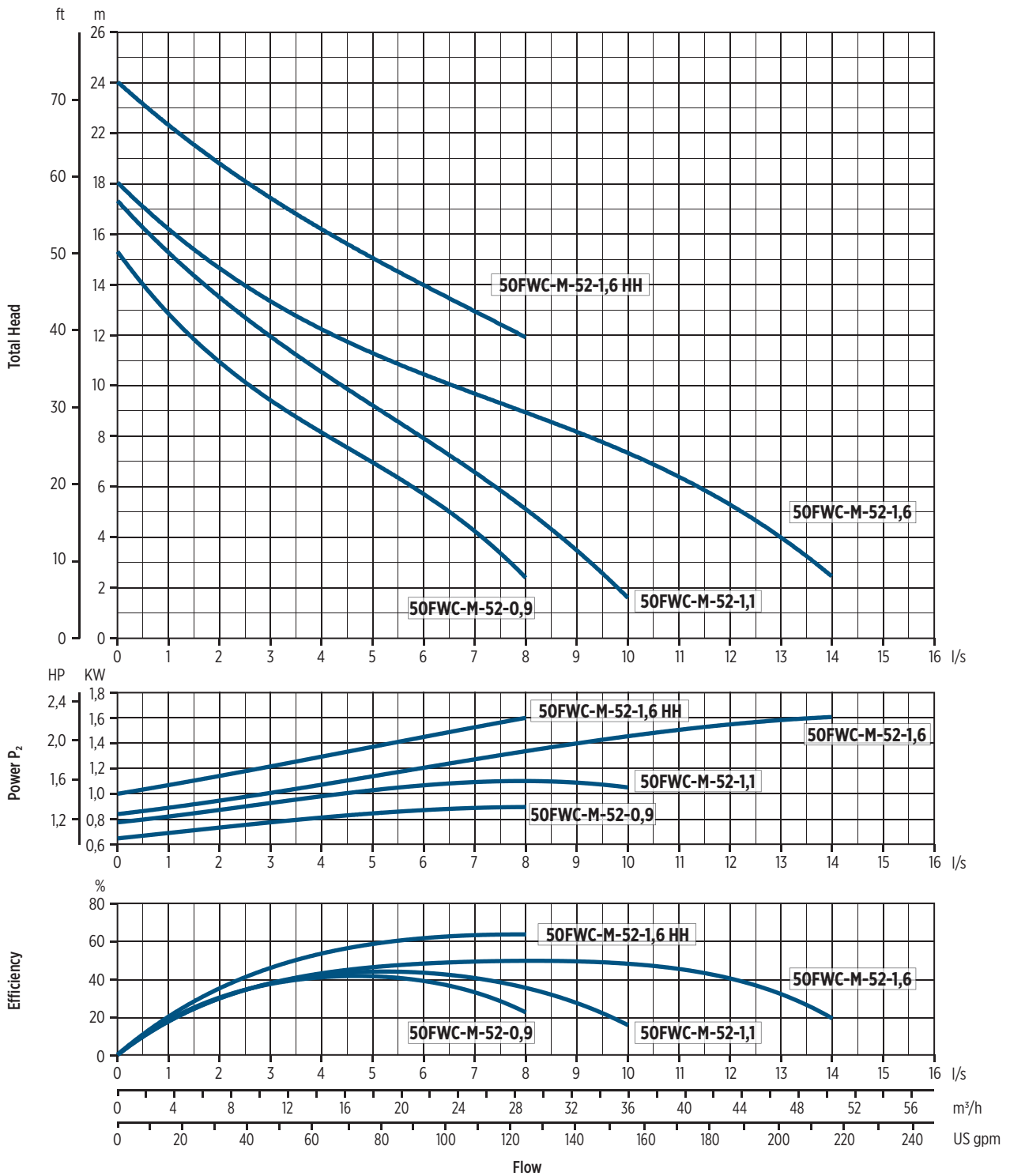
Pump model	Motor absorbed power P <sub>1</sub>	Rated power P <sub>2</sub>		Voltage [V]	Rated current [A]	Phases	Power cable		Float switch	Starting capacitor	Discharge port	Weight [kg]
	[kW]	[kW]	[HP]				Length [m]	Type		[μF]		
50FWC-M-52-0,9M	1,3	0,9	1,2	230	5,8	1 ~	10	4G1,5	-	25	G2 (Ø50)	30
50FWC-M-52-0,9M-G	1,3	0,9	1,2	230	5,8	1 ~	10	4G1,5	•	25	G2 (Ø50)	30
50FWC-M-52-0,9T	1,3	0,9	1,2	400	2	3 ~	10	4G1,5	-	-	G2 (Ø50)	30
50FWC-M-52-0,9T-G	1,3	0,9	1,2	400	2	3 ~	10	4G1,5	•	-	G2 (Ø50)	30
50FWC-M-52-1,1M	1,7	1,1	1,5	230	7	1 ~	10	4G1,5	-	30	G2 (Ø50)	30
50FWC-M-52-1,1M-G	1,7	1,1	1,5	230	7	1 ~	10	4G1,5	•	30	G2 (Ø50)	30
50FWC-M-52-1,1T	1,6	1,1	1,5	400	3	3 ~	10	4G1,5	-	-	G2 (Ø50)	30
50FWC-M-52-1,1T-G	1,6	1,1	1,5	400	3	3 ~	10	4G1,5	•	-	G2 (Ø50)	30
50FWC-M-52-1,6M	2,3	1,6	2,1	230	11	1 ~	10	4G2,5	-	40	G2 (Ø50)	34
50FWC-M-52-1,6M-G	2,3	1,6	2,1	230	11	1 ~	10	4G2,5	•	40	G2 (Ø50)	34
50FWC-M-52-1,6T	2,2	1,6	2,1	400	4	3 ~	10	4G1,5	-	-	G2 (Ø50)	34
50FWC-M-52-1,6T-G	2,2	1,6	2,1	400	4	3 ~	10	4G1,5	•	-	G2 (Ø50)	34
50FWC-M-52-1,6T-HH	2,2	1,6	2,1	400	4,2	3 ~	10	4G1,5	-	-	G2 (Ø50)	34

"-" = not available

• = available

# 50FWC-M-52

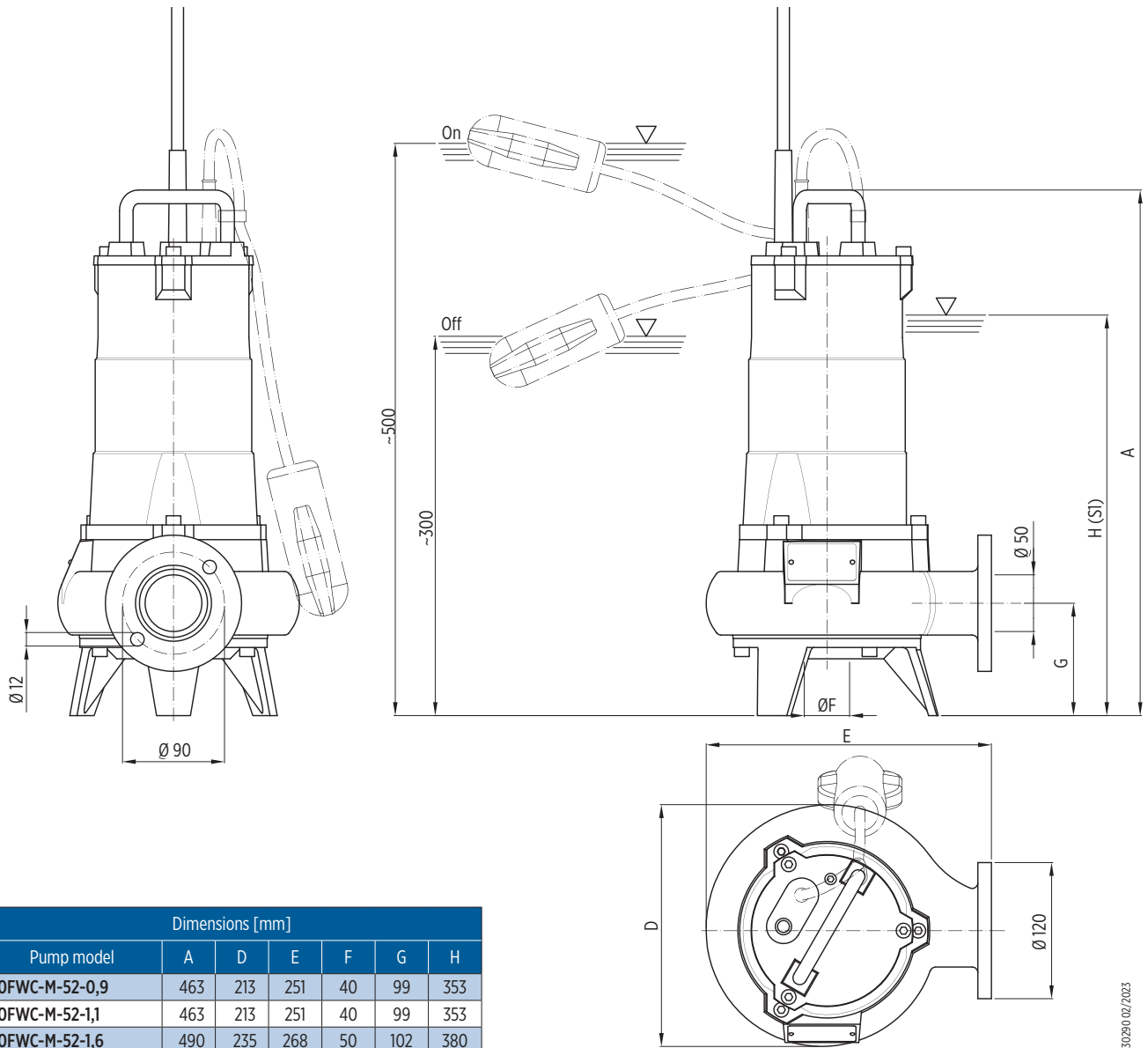
## PERFORMANCE CURVES AT 50 HZ



0020105 02/2023

# 50FWC-M-52

## DIMENSIONS



00150250 02/2023

Dimensions [mm]						
Pump model	A	D	E	F	G	H
50FWC-M-52-0,9	463	213	251	40	99	353
50FWC-M-52-1,1	463	213	251	40	99	353
50FWC-M-52-1,6	490	235	268	50	102	380
50FWC-M-52-1,6HH	490	235	268	50	102	380

Package		
Pump model	Dimensions [mm]	Weight [kg]
50FWC-M-52-0,9	290x245x585	31
50FWC-M-52-1,1		
50FWC-M-52-1,6	300x260x585	35
50FWC-M-52-1,6HH		

# 50FWC-M-52

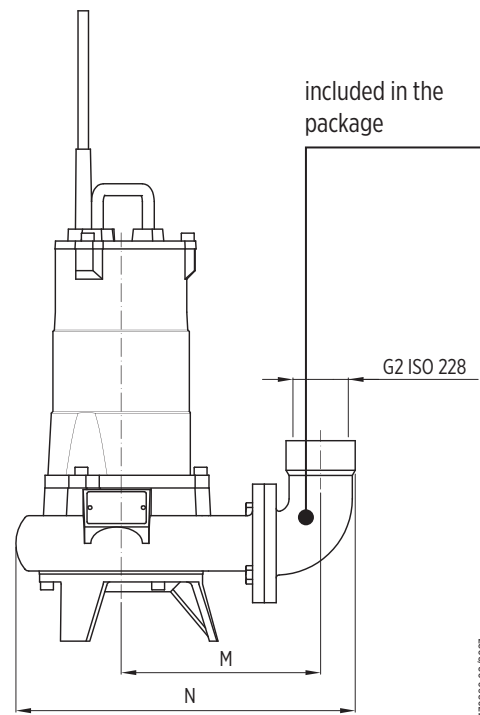
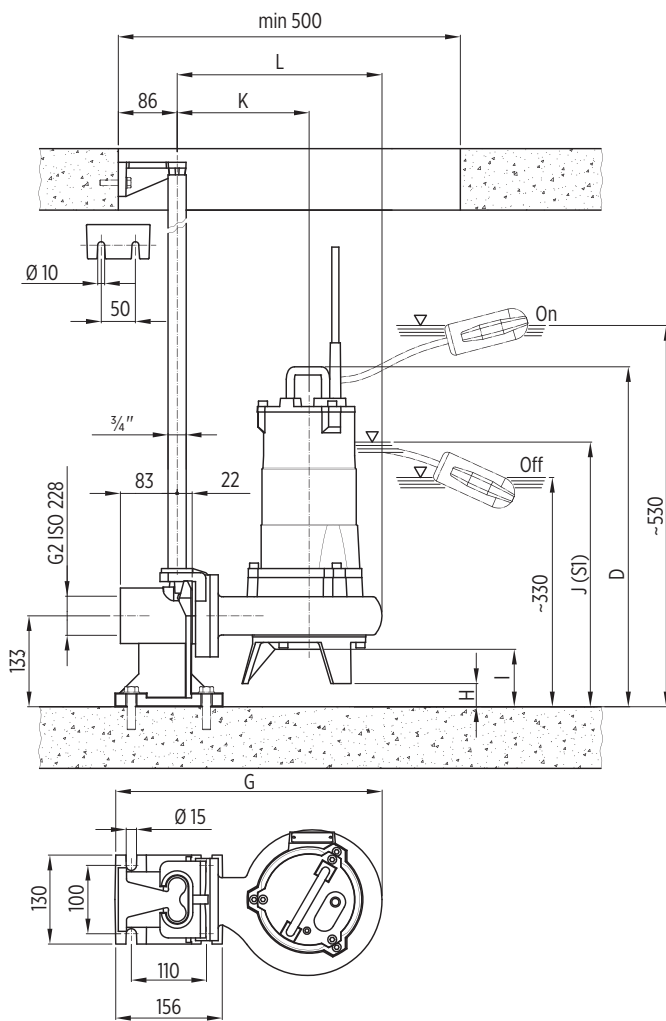
## INSTALLATION

### 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.

### Transportable installation

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



00130290-02/2023

Installation Dimensions [mm]

Pump model	D	G	H	I	J	K	L	M	N
50FWC-M-52-0,9	497	390	34	84	387	193	300	202	344
50FWC-M-52-1,1	497	390	34	84	387	193	300	202	344
50FWC-M-52-1,6	521	407	31	81	414	200	316	209	360
50FWC-M-52-1,6HH	521	407	31	81	414	200	316	209	360

## 65FWC Series – Submersible Wastewater pumps

- Pump models – discharge DN65:
  - 65FWC-V-52 (Vortex impeller, 2 poles motor)
  - 65FWC-V-54 (Vortex impeller, 4 poles motor)
  - 65FWC-M-52 (Single channel impeller, 2 poles motor)
- Impeller type: Vortex (V) or single-channel (M)
- Sic/Sic mechanical seal
- Fully cast iron construction
- Stainless steel handle
- Wide range of accessories available

### Technical data

- Flow: up to 64.8 m<sup>3</sup>/h
- Total Head: up to 24 m
- Motor power: 0.75 -2.2 kW
- Minimum immersion depth:
  - 464 mm (65FWC-V-52)
  - 442 mm (65FWC-V-54)
  - 445 mm (65FWC-M-52)
- Maximum immersion depth: 5 m
- Free passage:
  - 65 mm (65FWC-V-52)
  - 60 mm (65FWC-V-54)
  - 50 mm (65FWC-M-52)

### ACCESSORIES

- Threaded flange kit
- Competitor replacement adapter
- Coupling system
- Chain AISI316
- Shackle AISI316
- Sacrificial anodes belt
- For more information about accessories see p. 92

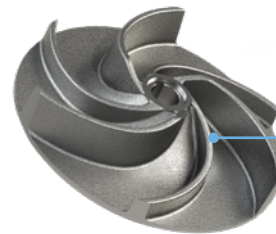


**Cast iron construction**  
to withstand harsh conditions

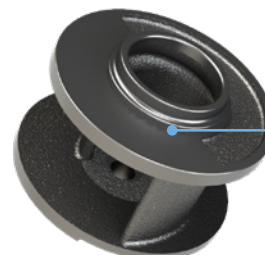
**Cable length 10 m**

**2 or 4 poles motor**

**Sic/Sic mechanical seal**  
to withstand abrasive fluid



**Vortex impeller (V)**  
for a wide passage



**Single channel impeller (M)**  
for high head



Pumping of clear non-loaded fluids



Extraction of water from ponds, streams or pits and for rainwater collection



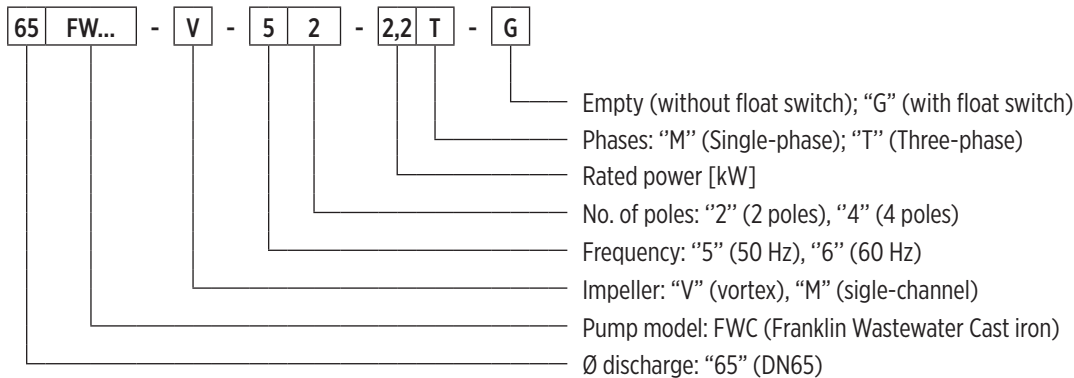
Pumping of industrial sewage, screened wastewater and sludge



Lift and pumping stations

# 65FWC Series – Submersible Wastewater pumps

## PRODUCT IDENTIFICATION CODE



00H0086 03/2016

## GENERAL FEATURES

		Materials/Constr.design
Impeller		Cast iron EN GJL200
External casing		Cast iron EN GJL200
Pump body		Cast iron EN GJL200
Cover		Cast iron EN GJL200
Mechanical seal	motor side 65FWC-V-52, 65FWC-M-52	Seal ring
	motor side 65FWC-V-54	Silicon carbide (SiC/SiC)
	pump side	Silicon carbide (SiC/SiC)
Motor shaft		Stainless steel AISI420
Power cable	Type	10 m H07RN-F
	Single-phase / Three-phase 65FWC-V-52, 65FWC-M-52	4G1,5mm <sup>2</sup>
	Single-phase 65FWC-V-54	4G1,5mm <sup>2</sup> , capacitor box and SCHUKO plug (CEE 7/VII)
	Three-phase 65FWC-V-54	4G1,5mm <sup>2</sup>
		Motor
Constr.design		asynchronous squirrel cage-type in oil chamber
Type	65FWC-V-52, 65FWC-M-52	2 poles; 50 Hz
	65FWC-V-54	4 poles; 50 Hz
Insulation class		F
Protection degree		IP68
Voltage	Single-phase 65FWC-V-54	230V ±6% built-in overheating protection capacitor box and SCHUKO plug (CEE 7/VII)
	Three-phase 65FWC-V-52, 65FWC-M-52, 65FWC-V-54	230V ±10%, 400V ±10%
		Operating limits
Maximum liquid temperature		+40 °C
pH of pumped liquid		6- 10
Liquid density		1,0 kg/dm <sup>3</sup>
Maximum immersion depth		5 m
Min. immersion depth for continuous service	65FWC-V-52	464 mm
	65FWC-V-54	442 mm
	65FWC-M-52	445 mm
Free passage	65FWC-V-52	65 mm
	65FWC-V-54	60 mm
	65FWC-M-52	50 mm
Max. number of starting/hour		20
		Construction options

- 60 Hz version
- Different voltages
- Food-grade white oil

# 65FWC-V-52

## HYDRAULIC PERFORMANCE 50 HZ

Pump model	Q = Delivery										
	l/sec 0	4	6	8	9	10	11	12	13	14	15
	m <sup>3</sup> /h 0	14,4	21,6	28,8	32,4	36	39,6	43,2	46,8	50,4	54
	US gpm 0	63,4	92,1	126,8	142,6	158,5	174,3	190,2	206	221,9	237,7
H = Total meters head of water column [m]											
65FWC-V-52-2,2	16,5	12,5	10,2	9	8	6,8	6	5,3	3,7	2	1,5

Application range

## TECHNICAL DATA

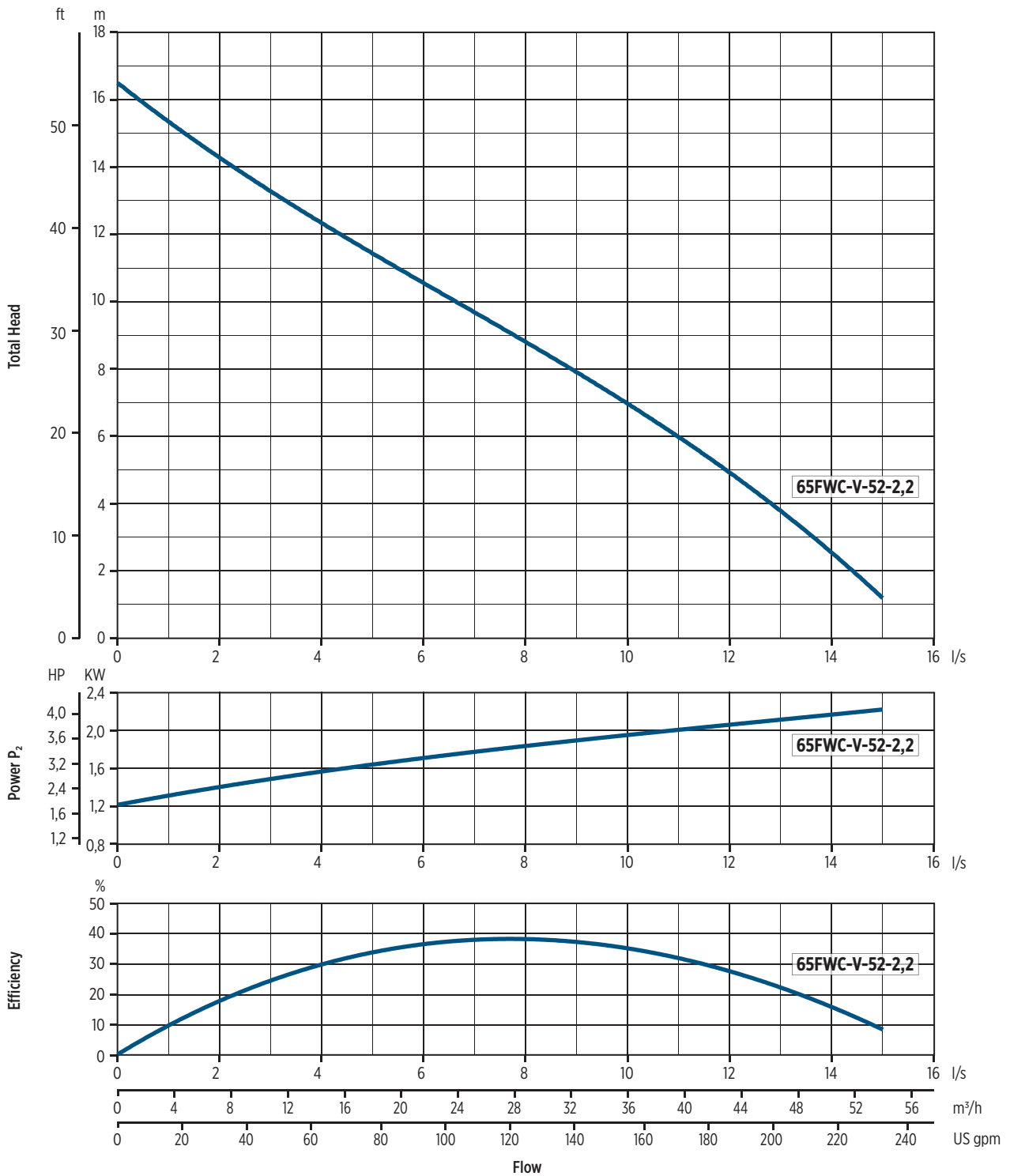
Pump model	Motor absorbed power P <sub>1</sub>	Rated power P <sub>2</sub>		Voltage	Rated current	Phases	Power cable		Float switch	Starting capacitor	Discharge port	Weight [kg]
	[kW]	[kW]	[HP]	[V]	[A]		Length [m]	Type		[μF]		
65FWC-V-52-2,2T	3,2	2,2	3	400	5,2	3 -	10	4G1,5	-	-	DN65	48

"-" = not available

• = available

# 65FWC-V-52

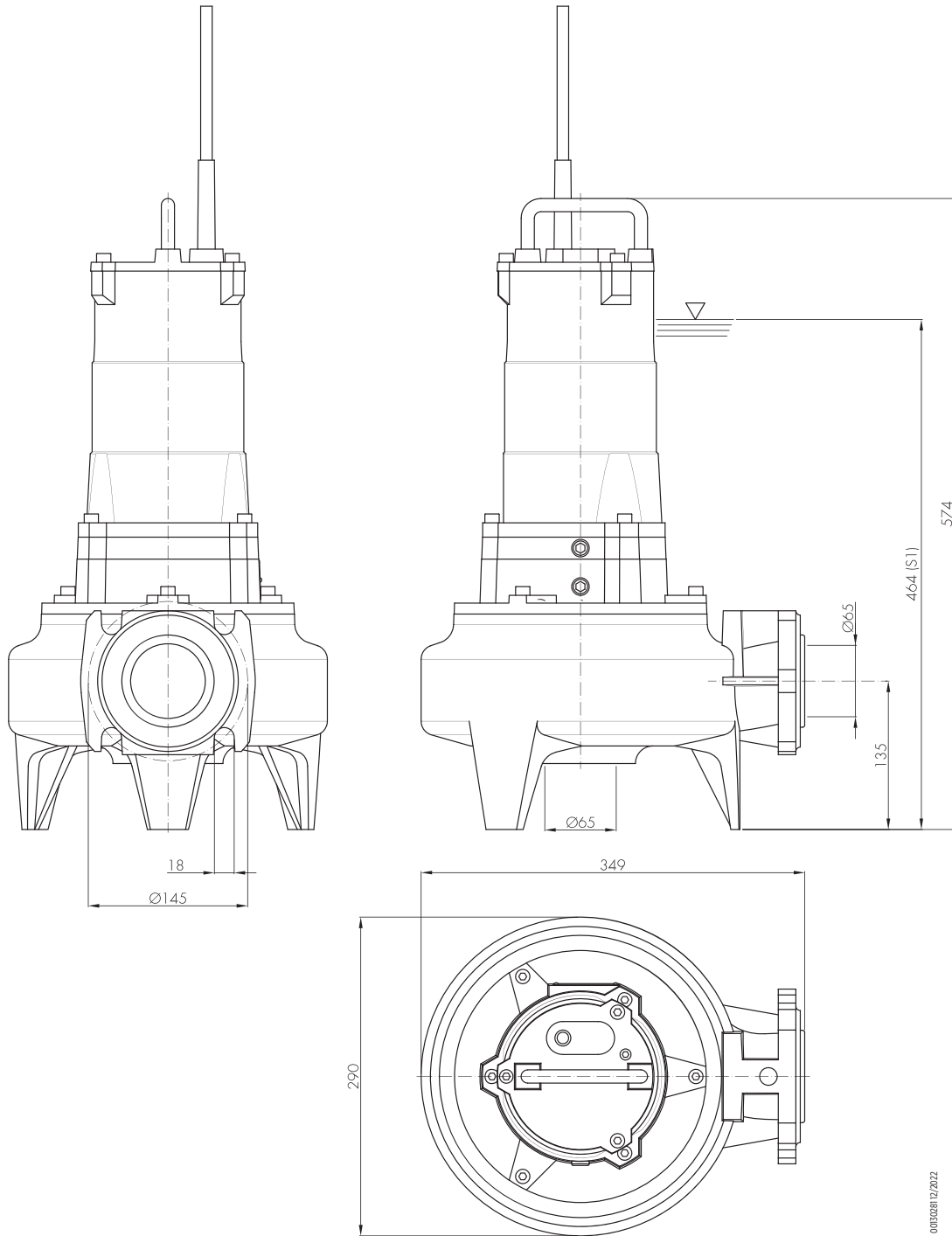
## PERFORMANCE CURVES AT 50 HZ



002009712/2022

# 65FWC-V-52

## DIMENSIONS



005028112/2022

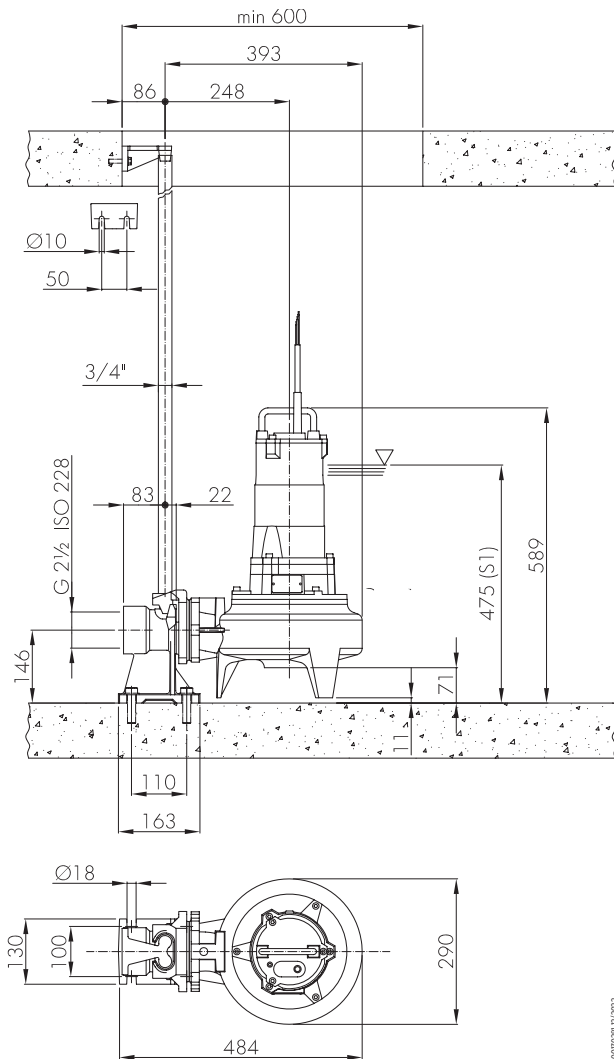
Package		
Pump model	Dimensions [mm]	Weight [kg]
65FWC-V-52-2,2	420x325x675	50

# 65FWC-V-52

## INSTALLATION

### Permanent installation with coupling system

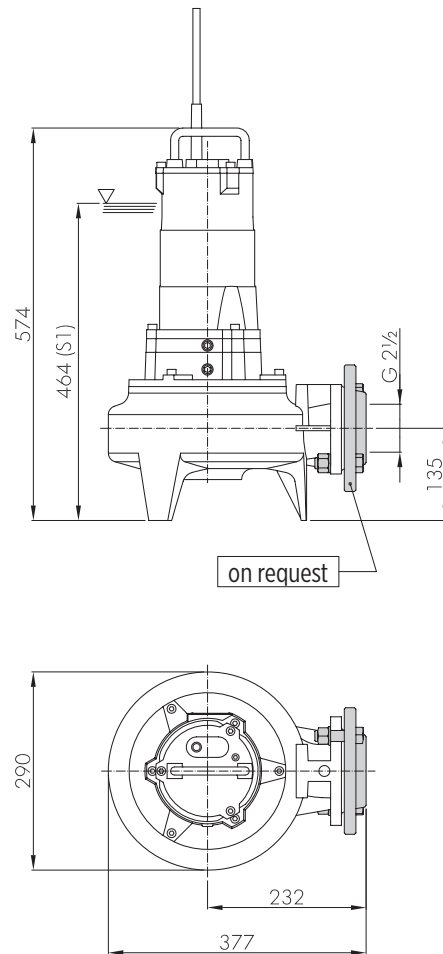
It is the recommended installation for the permanent pumping station. The electric pump is guided by two pipes and it is connected automatically to the coupling system. The quick connection ensures that the pump can be easily removed and re-installed.



010028 12/2022

### Transportable installation

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



010028 12/2022

# 65FWC-V-54

## HYDRAULIC PERFORMANCE 50 HZ

Pump model	Q = Delivery										
	l/sec 0	4	6	8	9	10	11	12	13	14	15
	m <sup>3</sup> /h 0	14,4	21,6	28,8	32,4	36	39,6	43,2	46,8	50,4	54
US gpm 0	63,4	92,1	126,8	142,6	158,5	174,3	190,2	206	221,9	237,7	
H = Total meters head of water column [m]											
65FWC-V-54-0,75	6	4.7	3.8	3	2						
65FWC-V-54-1,1	8.2	7	6.1	5	4.3	3.7	3	2.2	1.2		
65FWC-V-54-1,6	11	9.5	8.5	7.2	6.6	6.1	5.9	5.4	4.9	4	2.8

 Application range

## TECHNICAL DATA

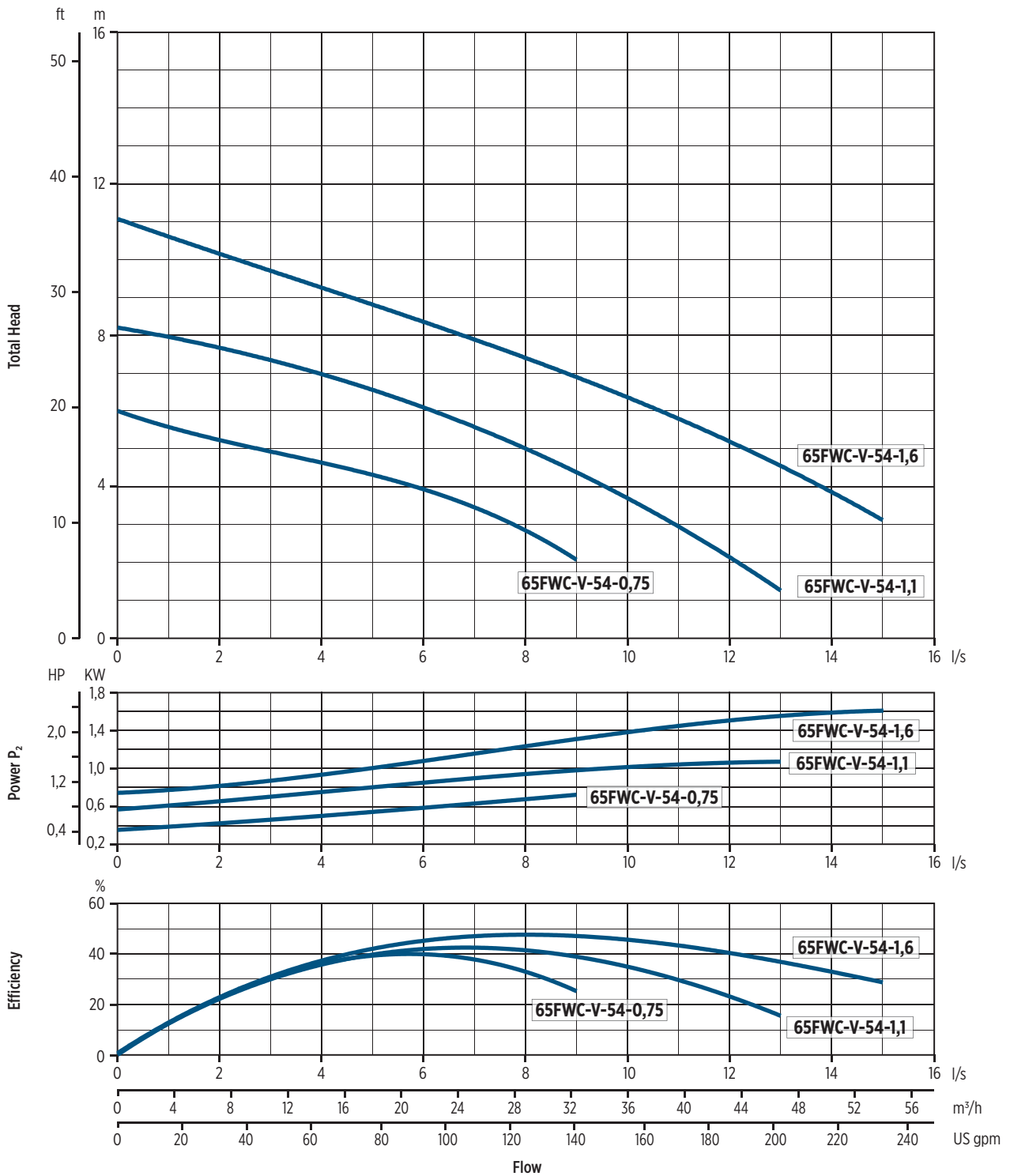
Pump model	Motor absorbed power P <sub>1</sub>	Rated power P <sub>2</sub>		Voltage	Rated current	Phases	Power cable		Float switch	Starting capacitor	Discharge port	Weight [kg]
	[kW]	[kW]	[HP]	[V]	[A]		Length [m]	Type		[μF]		
65FWC-V-54-0,75M	1	0,75	1	230	5	1 -	10	4G1,5	-	14	DN65	38
65FWC-V-54-0,75M-G	1	0,75	1	230	5	1 -	10	4G1,5	•	14	DN65	38
65FWC-V-54-0,75T	1	0,75	1	400	1,9	3 -	10	4G1,5	-	-	DN65	38
65FWC-V-54-0,75T-G	1	0,75	1	400	1,9	3 -	10	4G1,5	•	-	DN65	38
65FWC-V-54-1,1M	1,5	1,1	1,5	230	7	1 -	10	4G1,5	-	20	DN65	39
65FWC-V-54-1,1M-G	1,5	1,1	1,5	230	7	1 -	10	4G1,5	•	20	DN65	39
65FWC-V-54-1,1T	1,5	1,1	1,5	400	2,8	3 -	10	4G1,5	-	-	DN65	39
65FWC-V-54-1,1T-G	1,5	1,1	1,5	400	2,8	3 -	10	4G1,5	•	-	DN65	39
65FWC-V-54-1,6T	2,5	1,6	2,1	400	4,4	3 -	10	4G1,5	-	-	DN65	40

"-" = not available

• = available

# 65FWC-V-54

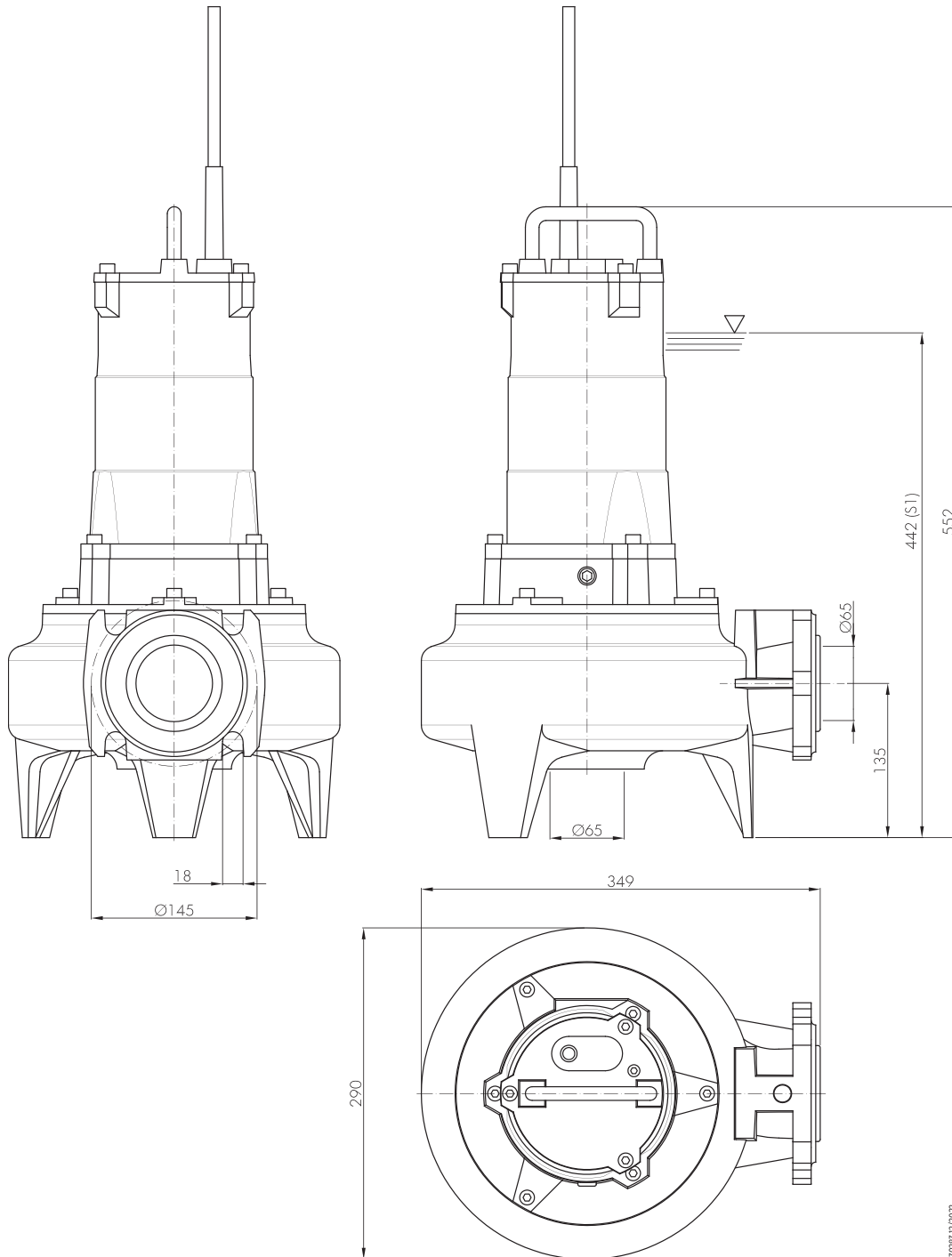
## PERFORMANCE CURVES AT 50 HZ



0020099.12/2022

# 65FWC-V-54

## DIMENSIONS



00130283 12/24/2

Package		
Pump model	Dimensions [mm]	Weight [kg]
65FWC-V-54-0,75	420x325x675	40
65FWC-V-54-1,1		41
65FWC-V-54-1,6		42



# 65FWC-M-52

## HYDRAULIC PERFORMANCE 50 HZ

Pump model	Q = Delivery												
	l/sec 0	4	6	8	9	10	11	12	13	14	15	16	18
	m <sup>3</sup> /h 0	14,4	21,6	28,8	32,4	36	39,6	43,2	46,8	50,4	54	57,6	64,8
US gpm 0	63,4	92,1	126,8	142,6	158,5	174,3	190,2	206	221,9	237,7	253,6	285,3	
H = Total meters head of water column [m]													
65FWC-M-52-1,6	18,5	12,5	10,4	8,5	7,7	6,8	5,7	4,9	3,6	2,3	1		
65FWC-M-52-2,2	24	17,8	15,3	13,2	12	11,3	10,2	9,1	7,9	6,6	5,1	3,6	1

Application range

## TECHNICAL DATA

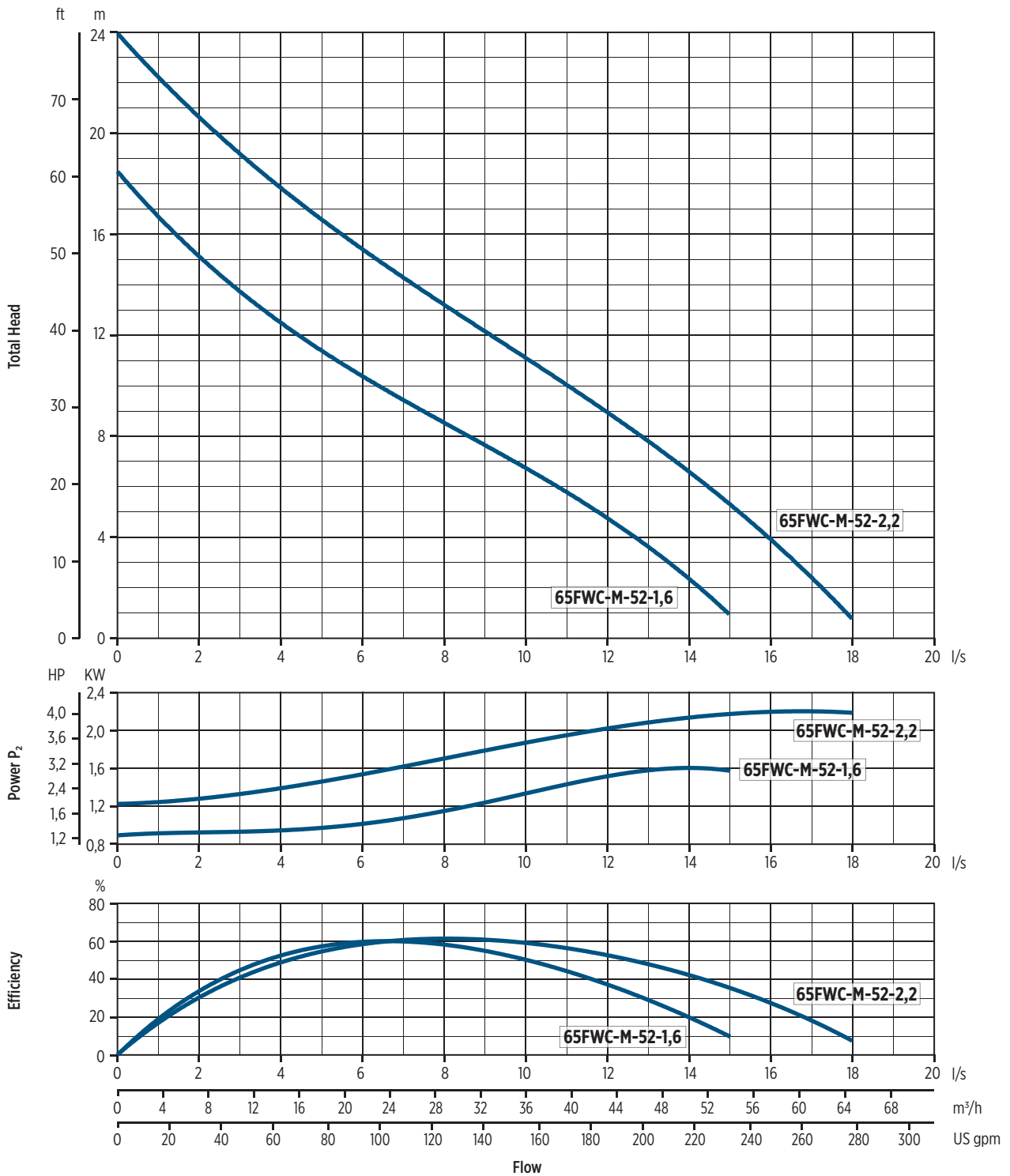
Pump model	Motor absorbed power P <sub>1</sub>	Rated power P <sub>2</sub>		Voltage	Rated current	Phases	Power cable		Float switch	Starting capacitor	Discharge port	Weight [kg]
	[kW]	[kW]	[HP]	[V]	[A]		Length [m]	Type		[μF]		
65FWC-M-52-1,6T	2,5	1,6	2,1	400	4,4	3 ~	10	4G1,5	-	-	DN65	50
65FWC-M-52-2,2T	3,2	2,2	3	400	5,2	3 ~	10	4G1,5	-	-	DN65	50

"-" = not available

• = available

# 65FWC-M-52

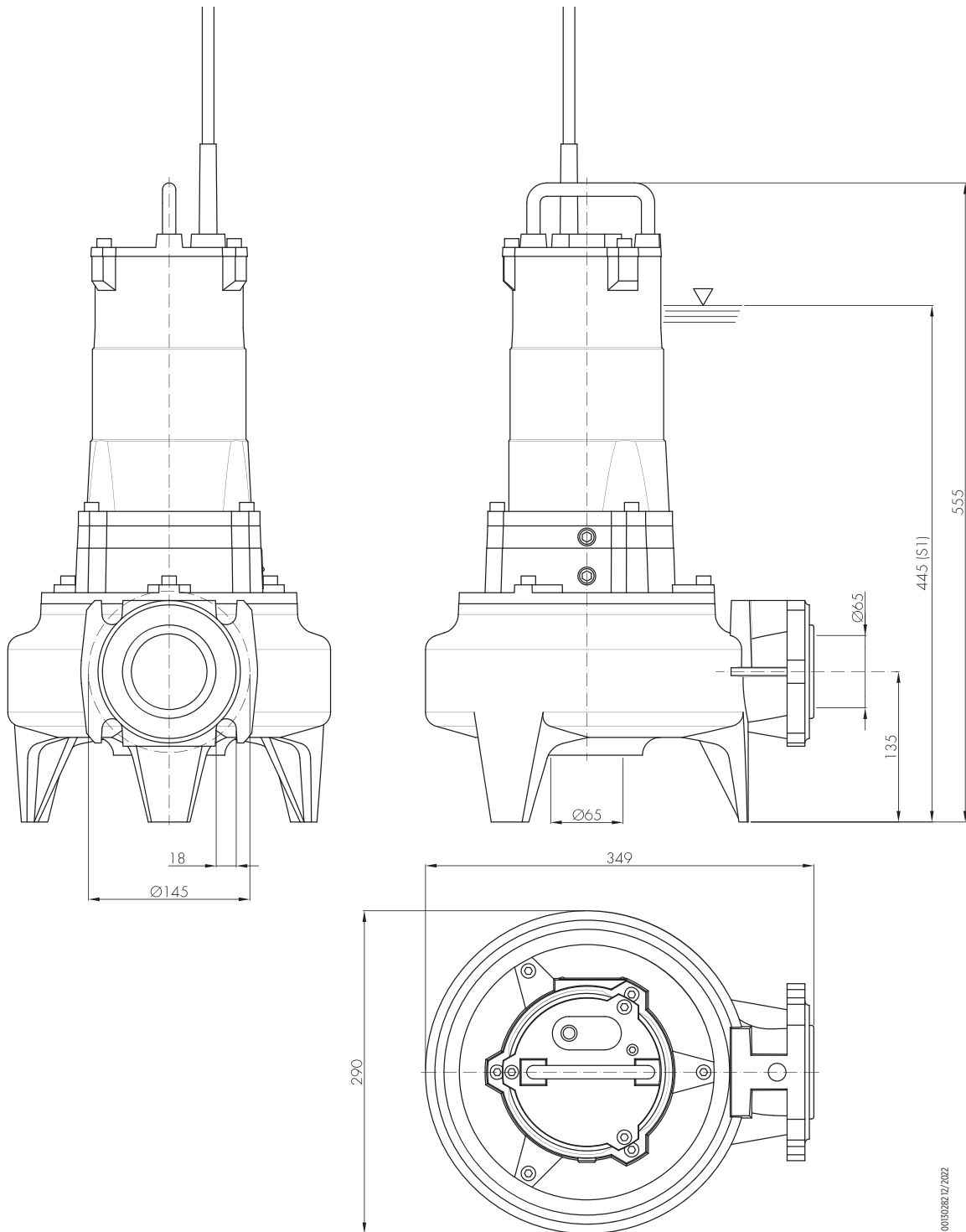
## PERFORMANCE CURVES AT 50 HZ



0010098 12/2022

# 65FWC-M-52

## DIMENSIONS



00130282.12/2022

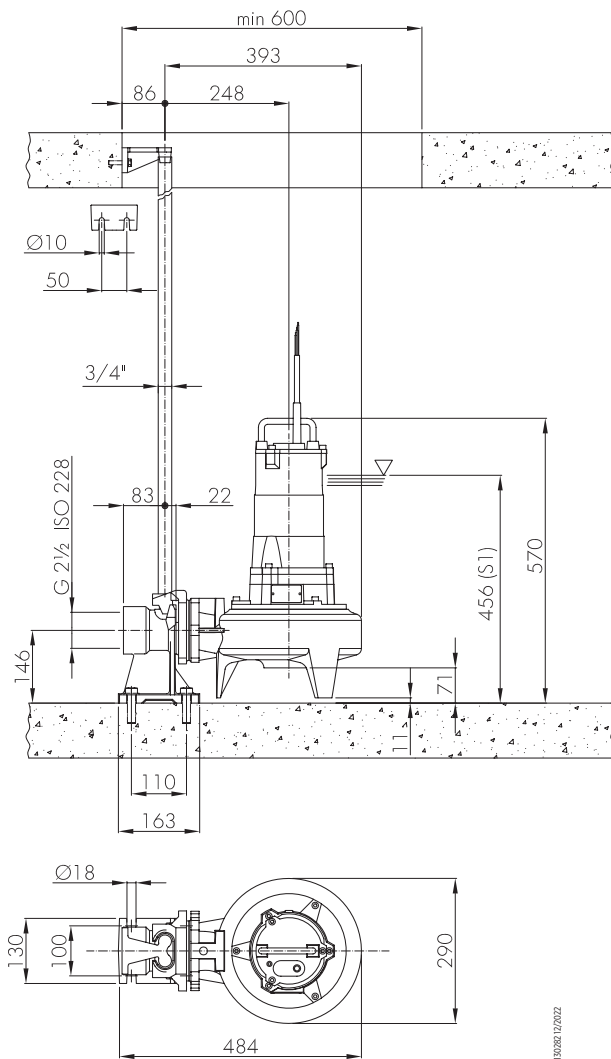
Package		
Pump model	Dimensions [mm]	Weight [kg]
65FWC-M-52-1,6T	420x325x675	52
65FWC-M-52-2,2T		

# 65FWC-M-52

## INSTALLATION

### Permanent installation with coupling system

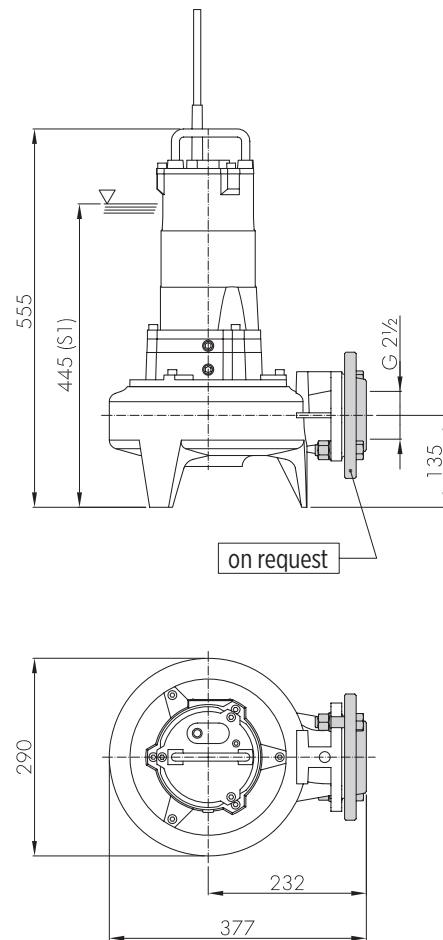
It is the recommended installation for the permanent pumping station. The electric pump is guided by two pipes and it is connected automatically to the coupling system. The quick connection ensures that the pump can be easily removed and re-installed.



00102062.12/2022

### Transportable installation

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



00102062.12/2022

## 80FWC Series – Submersible Wastewater pumps

- Pump models – discharge DN80:
  - 80FWC-V-54 (Vortex impeller, 4 poles motor)
  - 80FWC-M-54 (Single channel impeller, 4 poles motor)
- Impeller type: Vortex (V) or single-channel (M)
- Double mechanical seal
- Fully cast iron construction
- 10 m S1RN8-F power cable
- Stainless steel shackle for handling and movement
- Wide range of accessories available



### Technical data

- Flow: up to 169.2 m<sup>3</sup>/h
- Total Head: up to 19.8 m
- Motor power: 1.6 - 5.5 kW
- Minimum immersion depth:
  - 500 mm (80FWC-V-54)
  - 517 mm (80FWC-M-54)
- Maximum immersion depth: 5 m
- Free passage: 80 mm

**Cast iron construction**  
to withstand harsh conditions

**4 poles motor**

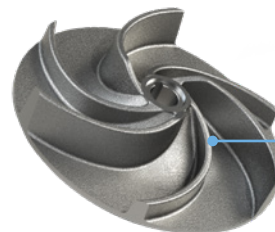
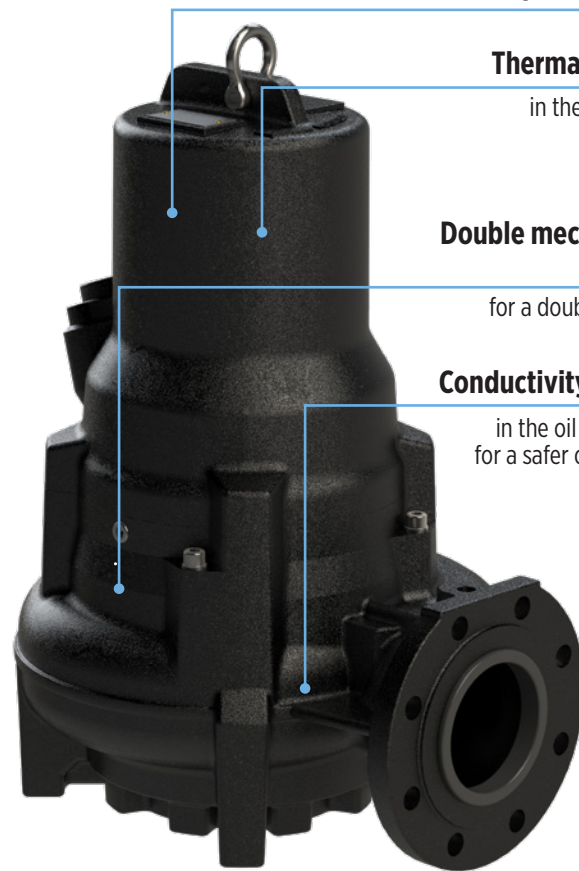
**Thermal probe**  
in the winding

**Double mechanical seal**  
for a double safety

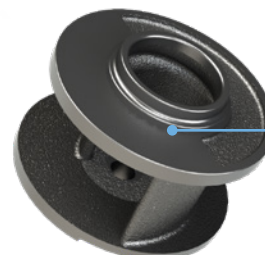
**Conductivity probe**  
in the oil chamber for a safer operation

### ACCESSORIES

- Threaded flange kit
- Base frame
- Competitor replacement adapter
- Coupling system
- Chain AISI316
- Shackle AISI316
- For more information about accessories see p. 92



**Vortex impeller (V)**  
for a wide passage



**Single channel impeller (M)**  
for high head



For liquids with an high solid content or with filamentous particles



Extraction of water from ponds, streams or pits and for rainwater collection



Pumping of industrial sewage, screened wastewater and sludge



Pumping of clear water and rainwater



Domestic / Industrial grey water

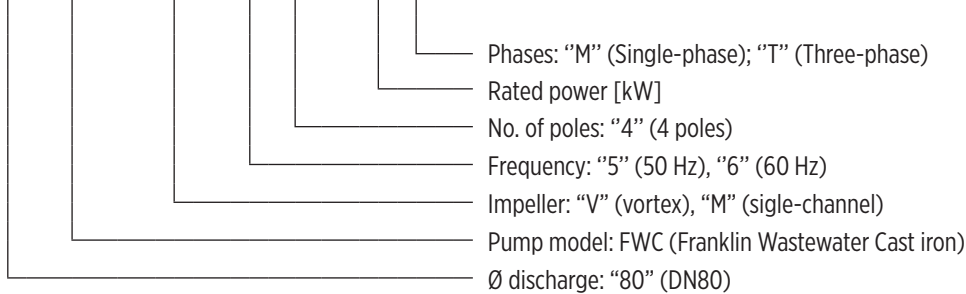


Lift and pumping stations

# 80FWC Series – Submersible Wastewater pumps

## PRODUCT IDENTIFICATION CODE

80 FW... - V - 5 2 - 1,8 T



00140086\_03/2016

## GENERAL FEATURES

Materials/Constr.design		
Impeller	Cast iron EN GJS400	
External casing	Cast iron EN GJL250	
Pump body	Cast iron EN GJL250	
Cover	Cast iron EN GJL250	
Mechanical seal	motor side	Graphite/Alumina
	pump side	Silicon carbide (SiC/SiC)
Motor shaft	Stainless steel AISI420	
Power cable	Type	10 m SIRN8-F
	80FWC-V-54-1,6T, 80FWC-V-54-2,2T, 80FWC-V-54-3,1T, 80FWC-M-54-2,2T, 80FWC-M-54-3,1T	4G1,5+3x1mm <sup>2</sup>
	80FWC-V-54-5,5T, 80FWC-M-54-5,5T	4G2,5+3x1mm <sup>2</sup>
Motor		
Constr.design	asynchronous squirrel cage-type in dry chamber	
Type	4 poles; 50 Hz	
Insulation class	F	
Protection degree	IP68	
Voltage	Three-phase	400V ±10%
Probe	Thermal probe in the winding	
	Conductivity probe in the oil chamber	
Operating limits		
Maximum liquid temperature	+40 °C	
pH of pumped liquid	6- 10	
Liquid density	1,0 kg/dm <sup>3</sup>	
Maximum immersion depth	5 m	
Min. immersion depth for continuous service	80FWC-V-54	500 mm
	80FWC-M-54	517 mm
Free passage	80 mm	
Max. number of starting/hour	20	
Construction options		

- 60 Hz version
- Different voltages

# 80FWC-V-54

## HYDRAULIC PERFORMANCE 50 HZ

Pump model	Q = Delivery															
	l/sec 0	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34
	m <sup>3</sup> /h 0	21,6	28,8	36	43,2	50,4	57,6	64,8	72	79,2	86,4	93,6	100,8	108	115,2	122,4
US gpm 0	92,1	126,8	158,5	190,2	221,9	253,6	285,3	317	348,7	380,4	412,1	443,8	475,5	507,2	538,9	
H = Total meters head of water column [m]																
80FWC-V-54-1,6T	9	7,5	6,9	6,2	5,4	4,7	3,8	3	2,2							
80FWC-V-54-2,2T	10,5	8,8	8,3	7,6	6,9	6,3	5,5	4,7	3,7	2,7						
80FWC-V-54-3,1T	13	11,1	10,6	9,9	9,3	8,6	7,9	7,1	6,3	5,4	4,4	3,2	2			
80FWC-V-54-5,5T	16	14,1	13,6	12,8	12,3	11,7	11	10,3	9,5	8,7	7,8	6,9	5,8	4,8	3,5	2,3

Application range

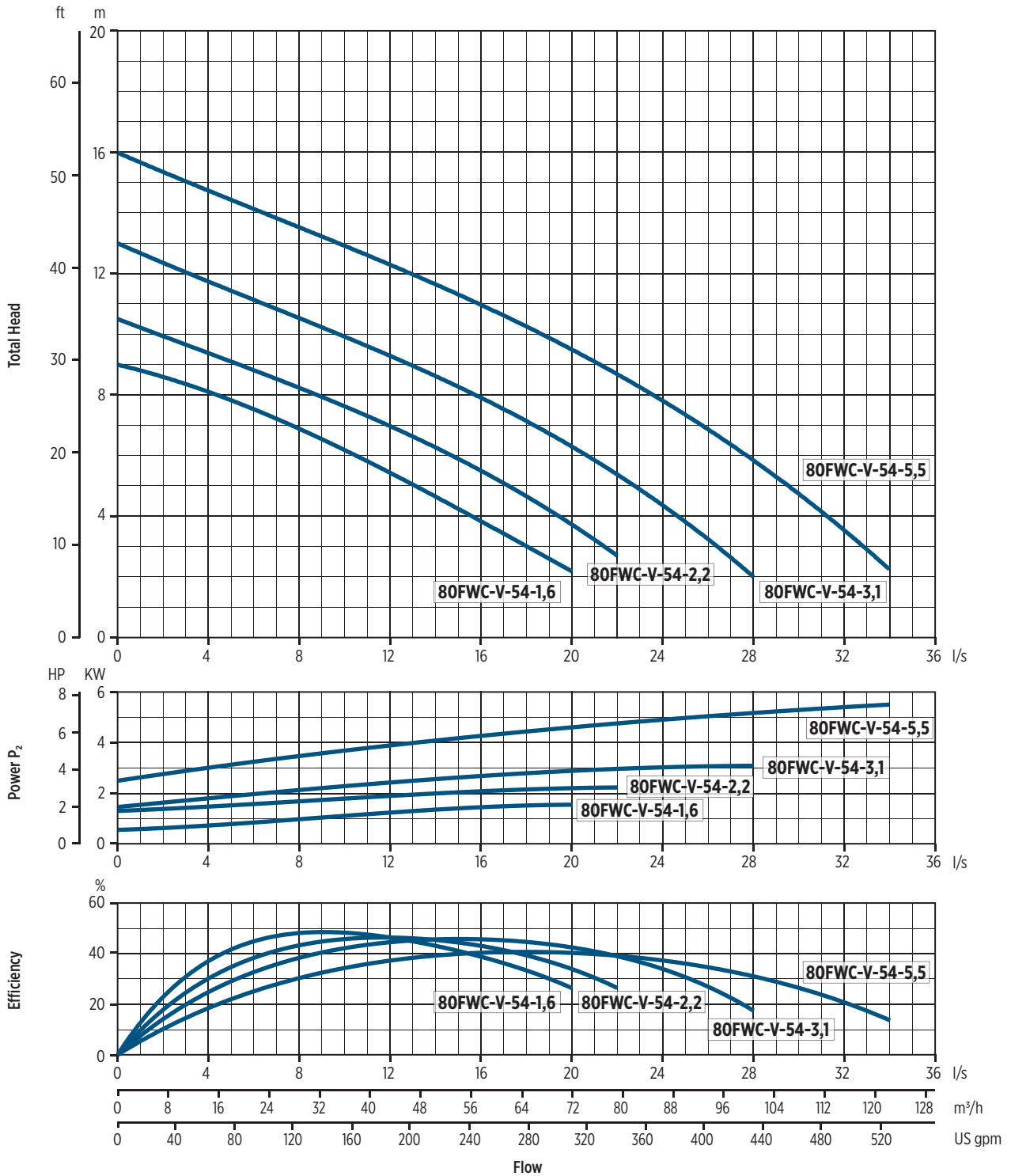
## TECHNICAL DATA

Pump model	Motor absorbed power P <sub>1</sub>	Rated power P <sub>2</sub>		Voltage	Rated current	Phase	Power cable		Float switch	Discharge port	Weight [kg]
	[kW]	[kW]	[HP]				[V]	[A]			
80FWC-V-54-1,6T	2,3	1,6	2,1	400	4,1	3 ~	10	4G1,5+3x1	-	DN80	83
80FWC-V-54-2,2T	2,8	2,2	3	400	5,4	3 ~	10	4G1,5+3x1	-	DN80	85
80FWC-V-54-3,1T	3,9	3,1	4,2	400	7,5	3 ~	10	4G1,5+3x1	-	DN80	89
80FWC-V-54-5,5T	6,6	5,5	7,5	400	11,7	3 ~	10	4G2,5+3x1	-	DN80	100

"-" = not available  
 • = available

# 80FWC-V-54

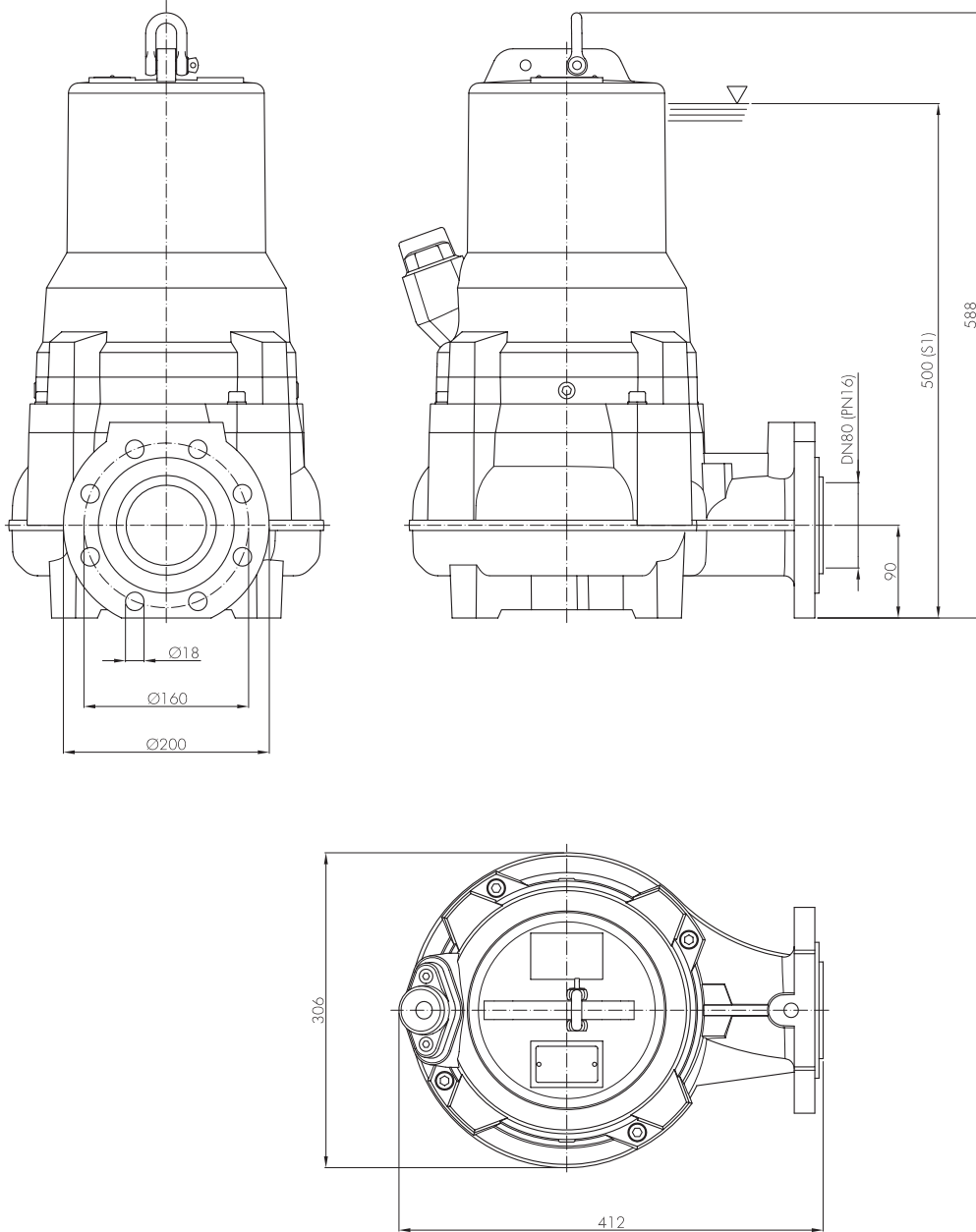
## PERFORMANCE CURVES AT 50 HZ



00201003.12/2022

# 80FWC-V-54

## DIMENSIONS



0030284-12/2022

Package		
Pump model	Dimensions [mm]	Weight [kg]
80FWC-V-54-1,6T	420x325x675	85
80FWC-V-54-2,2T		87
80FWC-V-54-3,1T		91
80FWC-V-54-5,5T		102

# 80FWC-V-54

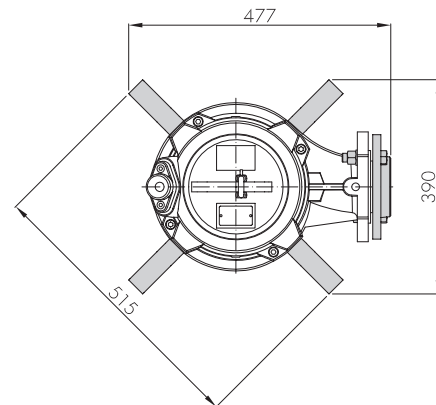
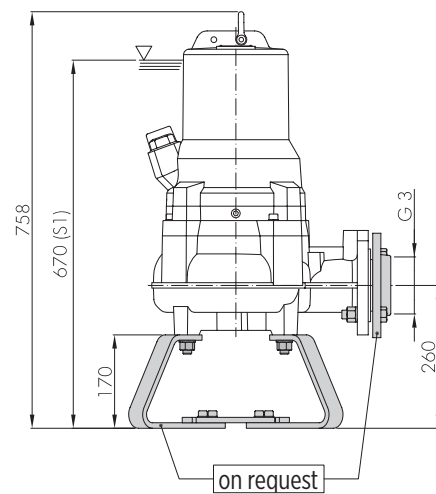
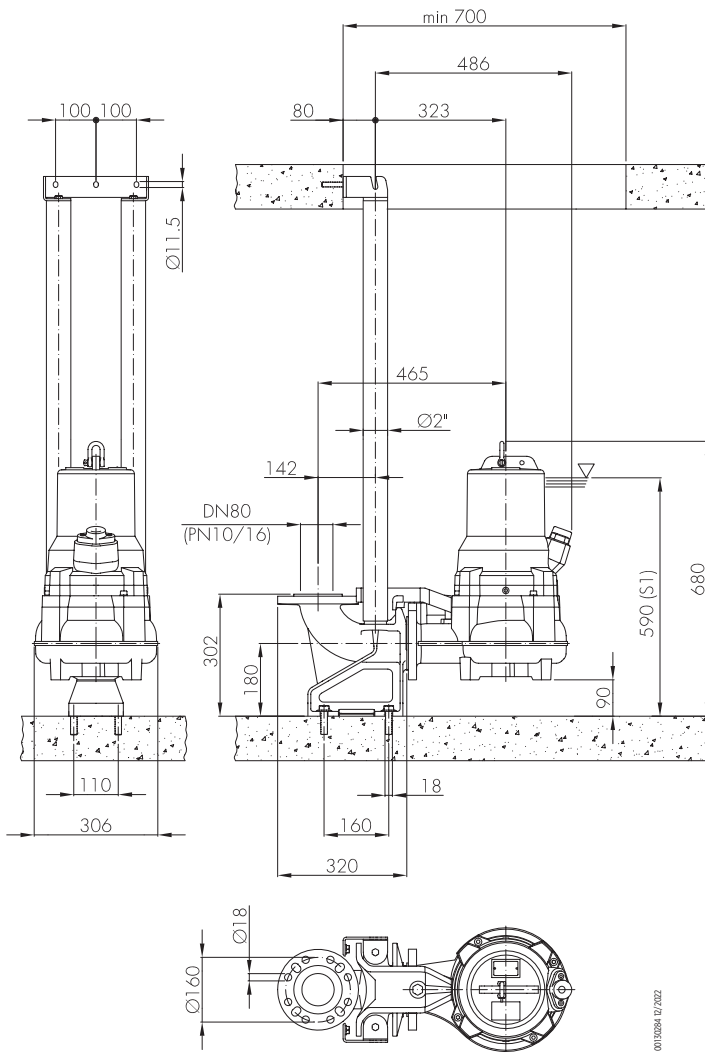
## INSTALLATION

### 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.

### Transportable installation

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



00120294 12/2022

3030284 12/2022

# 80FWC-M-54

## HYDRAULIC PERFORMANCE 50 HZ

Pump model	Q = Delivery												
	l/sec 0	6	10	15	20	25	30	35	38	40	42,8	45	47
	m <sup>3</sup> /h 0	21,6	36	54	72	90	108	126	136,8	144	154,1	162	169,2
	US gpm 0	92,1	158,5	237,7	317	396,2	475,5	554,8	602,3	634	678,4	713,3	745
H = Total meters head of water column [m]													
80FWC-M-54-2,2T	10,8	8,8	7,6	6,4	5,3	3,7	2,4	2					
80FWC-M-54-3,1T	15,6	12,1	10,8	9,6	8,4	7,1	5,5	5,2	3,7	2			
80FWC-M-54-5,5T	19,8	16,6	15,1	13,6	12,4	11	9,6	9,2	7,9	6,6	5,2	3	2

Application range

## TECHNICAL DATA

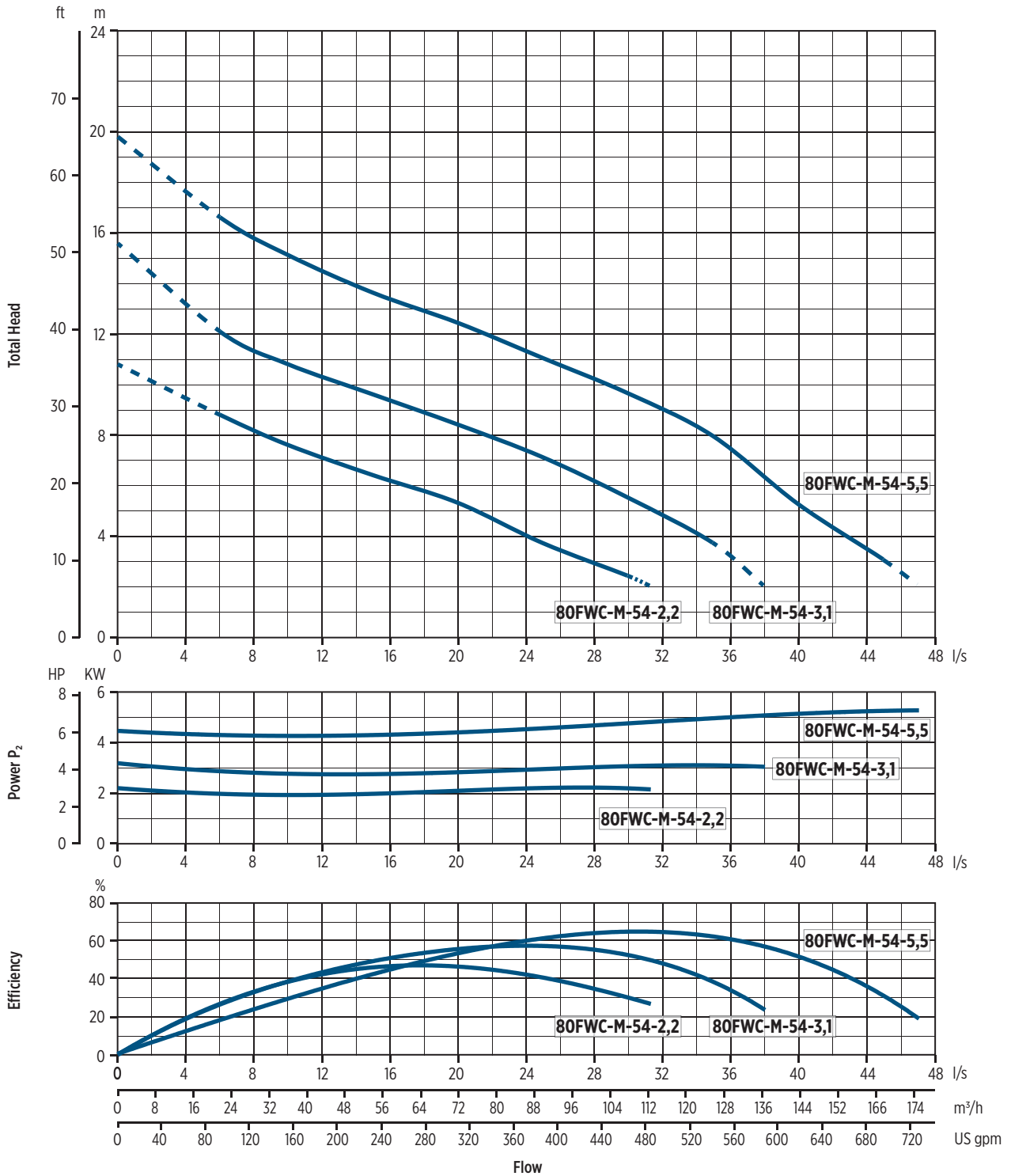
Pump model	Motor absorbed power P <sub>1</sub>	Rated power P <sub>2</sub>		Voltage	Rated current	Phase	Power cable		Float switch	Discharge port	Weight [kg]
	[kW]	[kW]	[HP]	[V]	[A]		Length [m]	Type			
80FWC-M-54-2,2T	2,8	2,2	3	400	5,4	3 ~	10	4G1,5+3x1	-	DN80	96
80FWC-M-54-3,1T	3,9	3,1	4,2	400	7,5	3 ~	10	4G1,5+3x1	-	DN80	99
80FWC-M-54-5,5T	6,6	5,5	7,5	400	11,7	3 ~	10	4G2,5+3x1	-	DN80	111

"-" = not available

• = available

# 80FWC-M-54

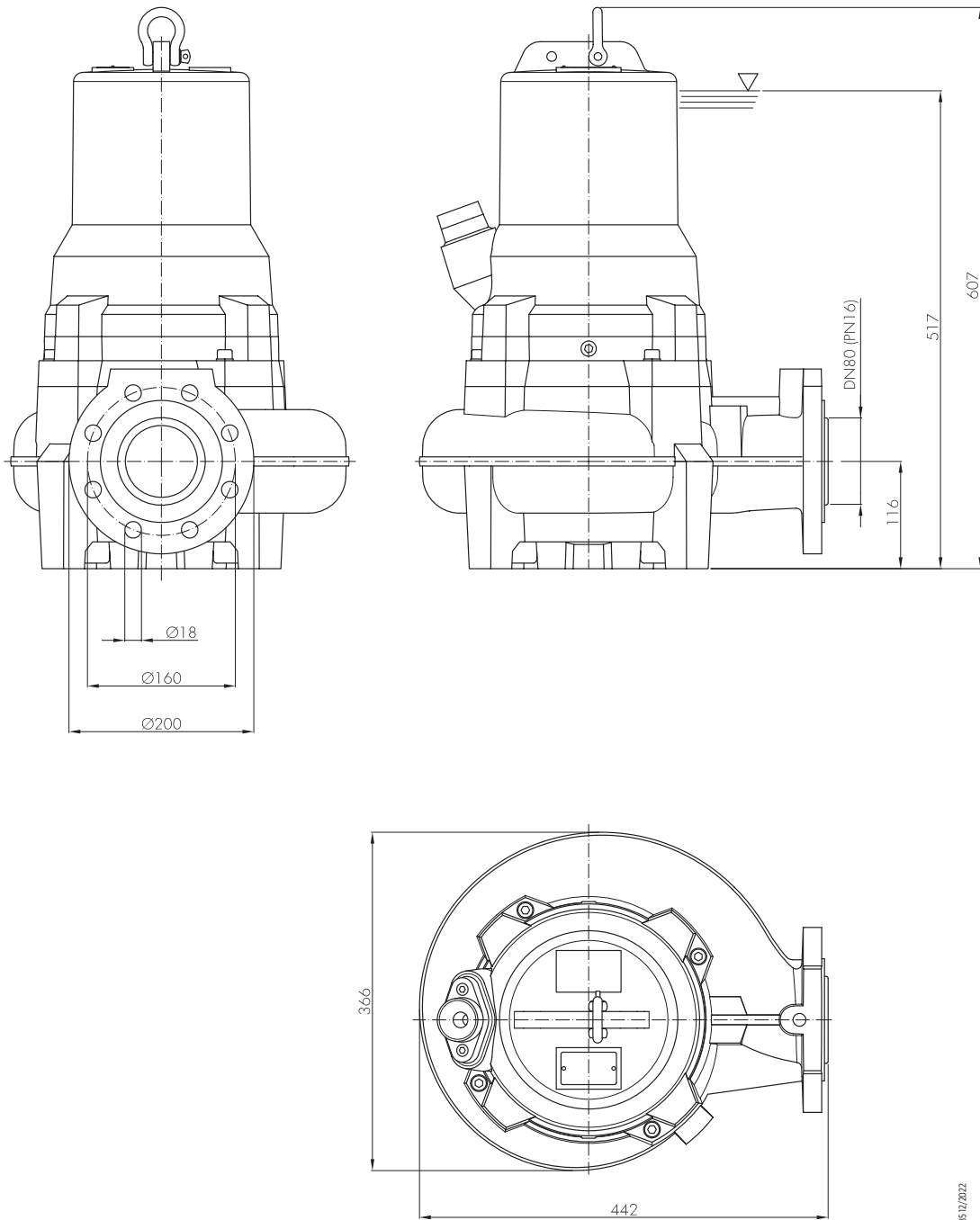
## PERFORMANCE CURVES AT 50 HZ



00201012/2022

# 80FWC-M-54

## DIMENSIONS



00180285 11/2012

Package		
Pump model	Dimensions [mm]	Weight [kg]
80FWC-M-54-2,2T	475x370x985	99
80FWC-M-54-3,1T		102
80FWC-M-54-5,5T		114

# 80FWC-M-54

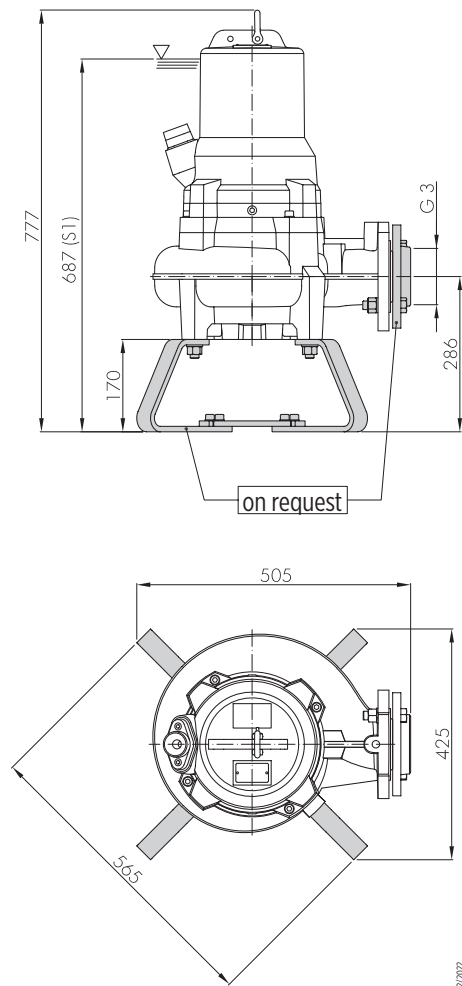
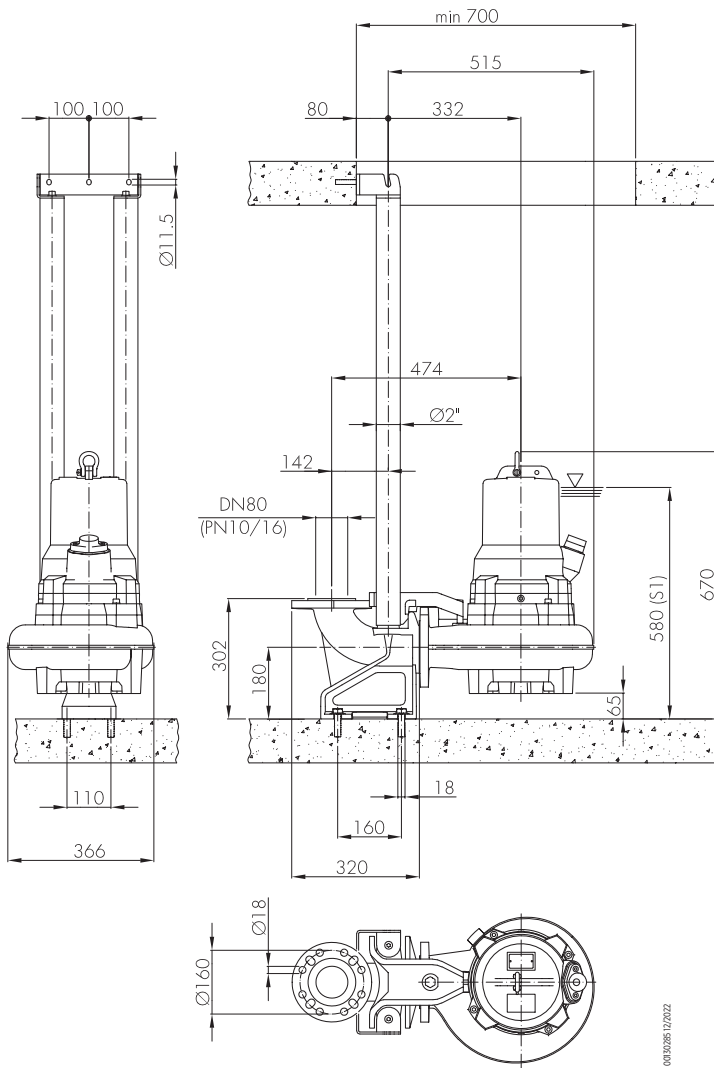
## INSTALLATION

### 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.

### Transportable installation

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



00330285 12/2022

328517/2022

# 100FWC Series- Submersible Wastewater pumps

- Pump models – discharge DN100:
  - 100FWC-M-54 (Single channel impeller, 4 poles motor)
- Impeller type: Single-channel (M)
- Double mechanical seal
- Fully cast iron construction
- 10 m SIRN8-F power cable
- Stainless steel shackle for handling and movement
- Wide range of accessories available



## Technical data

- Flow: up to 212.4 m<sup>3</sup>/h
- Total Head: up to 19 m
- Motor power: 2.2 - 5.5 kW
- Minimum immersion depth: 517 mm
- Maximum immersion depth: 5 m
- Free passage: 80 mm

**Cast iron construction**  
to withstand harsh conditions

**4 poles motor**

**Thermal probe**  
in the winding

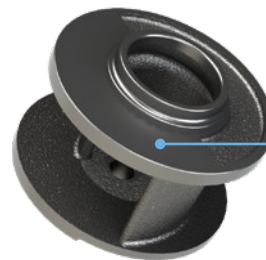
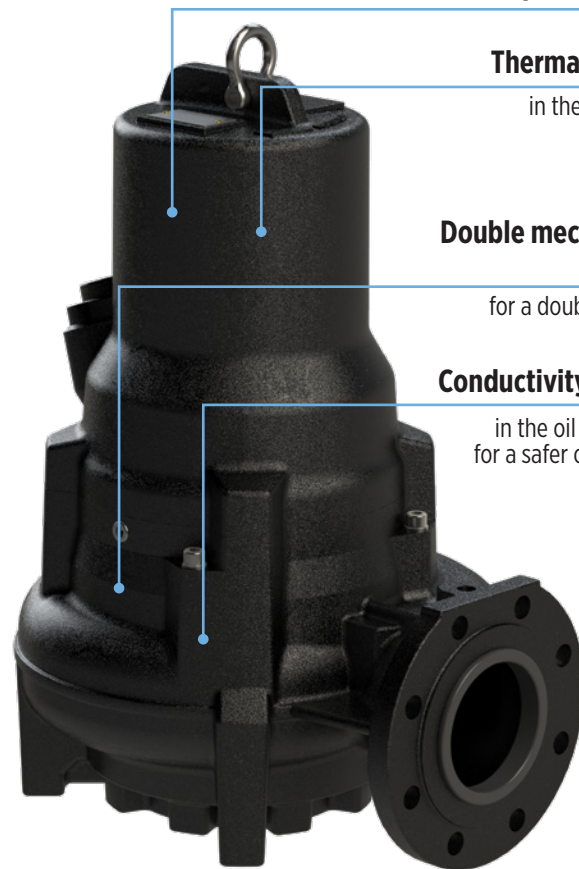
**Double mechanical seal**  
for a double safety

**Conductivity probe**  
in the oil chamber for a safer operation

## ACCESSORIES



- Threaded flange kit
- Base frame
- Competitor replacement adapter
- Coupling system
- Chain AISI316
- Shackle AISI316
- For more information about accessories see p. 92



**Single channel impeller (M)**  
for high head



For liquids with a high solid content or with filamentous particles



Extraction of water from ponds, streams or pits and for rainwater collection



Pumping of industrial sewage, screened wastewater and sludge



Pumping of clear water and rainwater



Domestic / Industrial grey water

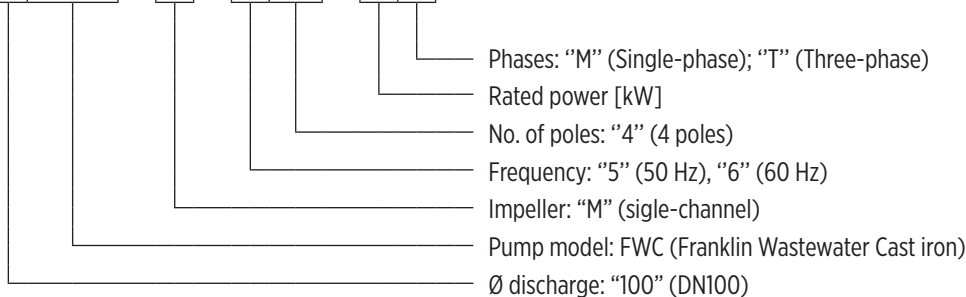


Lift and pumping stations

# 100FWC Series- Submersible Wastewater pumps

## PRODUCT IDENTIFICATION CODE

100 FW... - M - 5 2 - 1,8 T



00140086 03/2026

## GENERAL FEATURES

		Materials/Constr.design
Impeller		Cast iron EN GJS400
External casing		Cast iron EN GJL250
Pump body		Cast iron EN GJL250
Cover		Cast iron EN GJL250
Mechanical seal	motor side	Graphite/Alumina
	pump side	Silicon carbide (SiC/SiC)
Motor shaft		Stainless steel AISI420
Power cable	Type	10 m SIRN8-F
	100FWC-M-54-2,2T, 100FWC-M-54-3,1T	4G1,5+3x1mm <sup>2</sup>
	100FWC-M-54-5,5T	4G2,5+3x1mm <sup>2</sup>
		Motor
Constr.design		asynchronous squirrel cage-type in dry chamber
Type		4 poles; 50 Hz
Insulation class		F
Protection degree		IP68
Voltage	Three-phase	400V ±10%
Probe		Thermal probe
		Conductivity probe
		Operating limits
Maximum liquid temperature		+40 °C
pH of pumped liquid		6- 10
Liquid density		1,0 kg/dm <sup>3</sup>
Maximum immersion depth		5 m
Min. immersion depth for continuous service		517 mm
Free passage		80 mm
Max. number of starting/hour		20
		Construction options

- 60 Hz version
- Different voltages

# 100FWC-M-54

## HYDRAULIC PERFORMANCE 50 HZ

Pump model	Q = Delivery														
	l/sec 0	8	10	15	20	25	30	35	38	40	42,8	45	50	55	59
	m <sup>3</sup> /h 0	28,8	36	54	72	90	108	126	136,8	144	154,1	162	180	198	212,4
	US gpm 0	126,8	158,5	237,7	317	396,2	475,5	554,8	602,3	634	678,4	713,3	792,5	871,8	935,2
H = Total meters head of water column [m]															
100FWC-M-54-2,2T	10,6	8,9	8,4	7,3	6,3	5,1	3,9	2,6	1,6						
100FWC-M-54-3,1T	12,7	11	10,5	9,4	8,4	7,2	6	4,5	3,6	3	2				
100FWC-M-54-5,5T	19	16	15,2	13,8	12,5	11,3	10,2	9,1	8,3	7,8	7,1	6,5	4,8	3	1,3

Application range

## TECHNICAL DATA

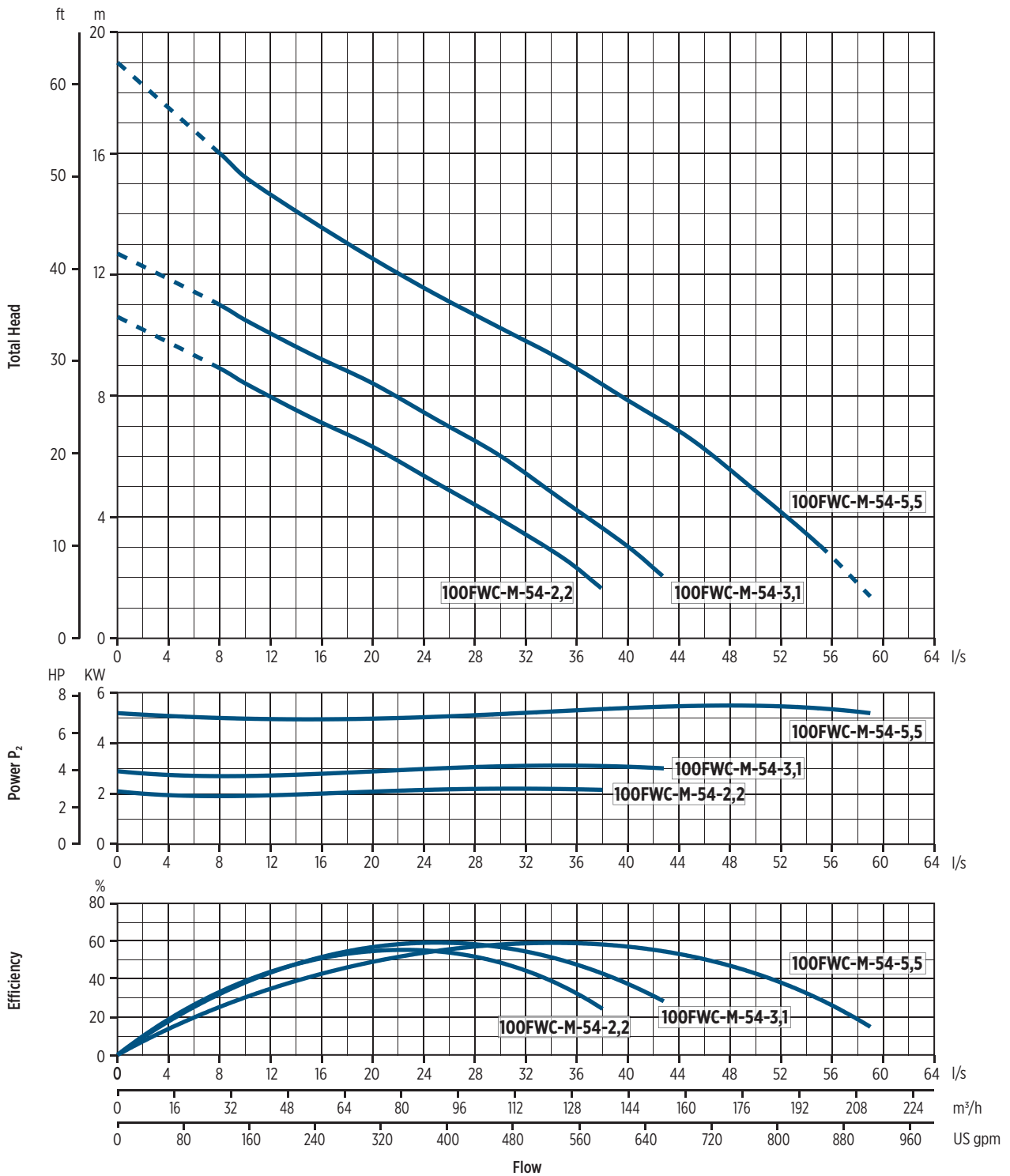
Pump model	Motor absorbed power P <sub>1</sub>	Rated power P <sub>2</sub>		Voltage	Rated current	Phase	Power cable		Float switch	Discharge port	Weight [kg]
	[kW]	[kW]	[HP]	[V]	[A]		Length [m]	Type			
100FWC-M-54-2,2T	2,8	2,2	3	400	5,4	3 ~	10	4G1,5+3x1	-	DN100	97
100FWC-M-54-3,1T	3,9	3,1	4,2	400	7,5	3 ~	10	4G1,5+3x1	-	DN100	100
100FWC-M-54-5,5T	6,6	5,5	7,5	400	11,7	3 ~	10	4G2,5+3x1	-	DN100	112

"-" = not available

• = available

# 100FWC-M-54

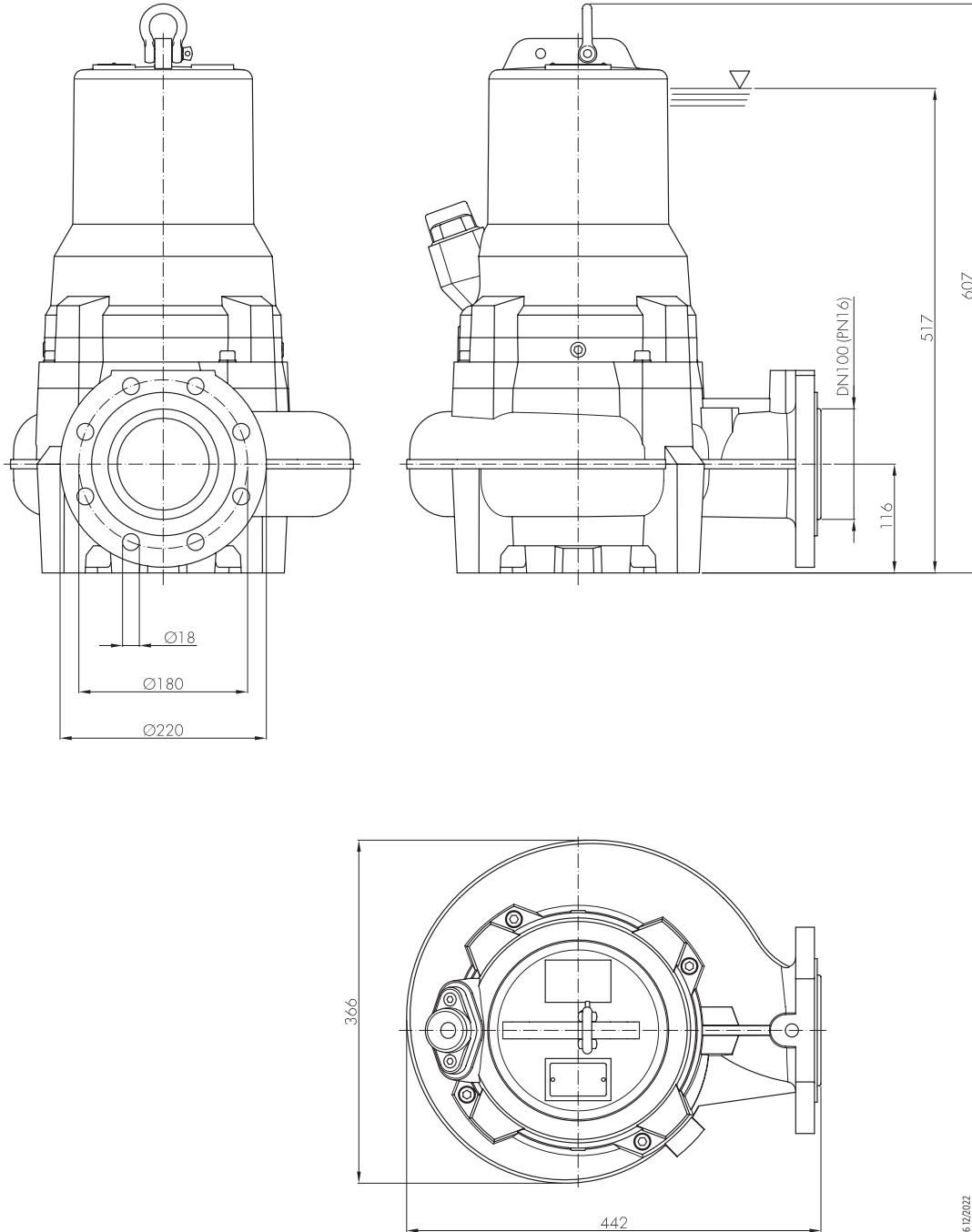
## PERFORMANCE CURVES AT 50 HZ



00201002 12/2022

# 100FWC-M-54

## DIMENSIONS



0030286 12/2022

Package		
Pump model	Dimensions [mm]	Weight [kg]
100FWC-M-54-2,2T	475x370x985	100
100FWC-M-54-3,1T		103
100FWC-M-54-5,5T		115

# 100FWC-M-54

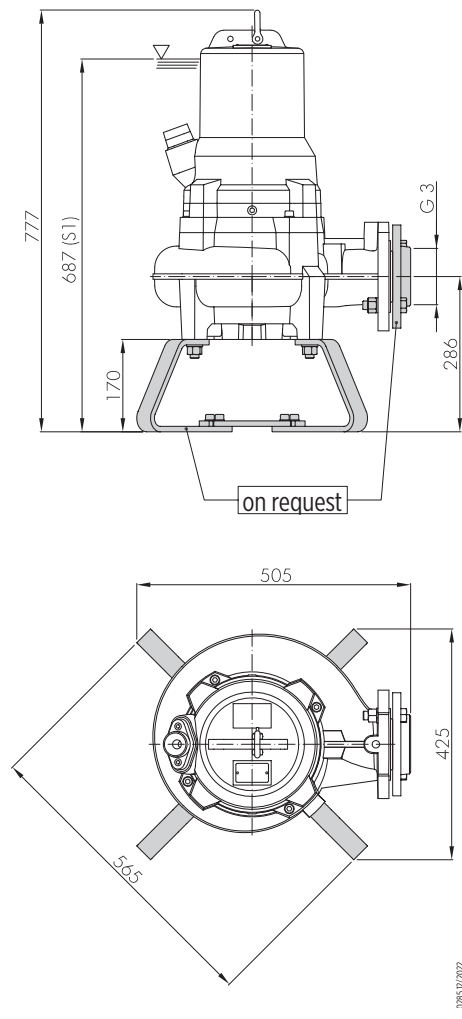
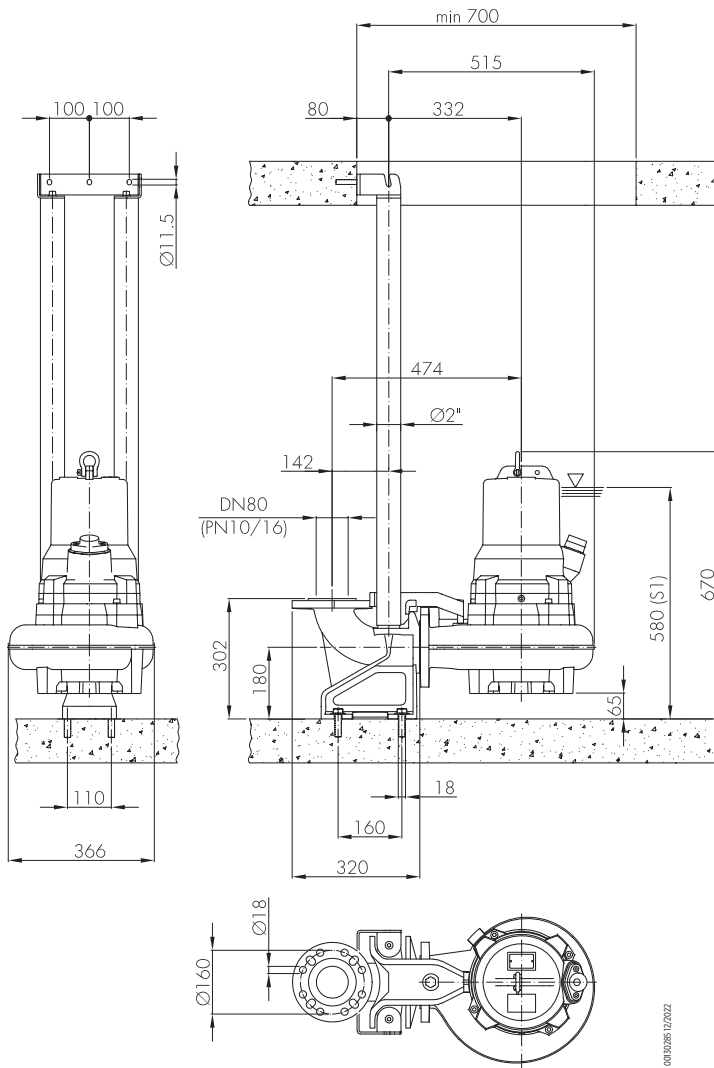
## INSTALLATION

### 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.

### Transportable installation

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





# Pumps with grinder unit 50 Hz

FGX, FGR SERIES



## FGX Series – Submersible Grinder pumps

- Pump model:
  - 40FGX-52 (discharge port Ø40mm)
- Impeller with grinder unit for cutting threadlike and fibrous materials in the pumped liquid
- Available with or without adjustable float switch
- Double mechanical seal in oil chamber (pump side SiC/SiC)
- Dry chamber motor
- Cast iron components with cataphoresis coating for increased corrosion resistance
- Quick connectors for easy maintenance
- Control box with thermal protection required for three-phase motors
- Single-phase versions up to 1.1 kW with built-in thermal protector
- Control panel with motor protection, manual reset, and starting/Starting capacitors
- Stainless steel handle
- Wide range of accessories available

### Technical data

- Flow: up to 12.6 m<sup>3</sup>/h
- Total Head: up to 21 m
- Motor power: 0.75 - 1.1 kW
- Minimum immersion depth: 353 mm
- Maximum immersion depth: 5 m

### ACCESSORIES

- Hose connection elbow
- Threaded elbow
- Threaded flange kit
- Coupling system
- Chain AISI316
- Shackle AISI316
- For more information about accessories see p. 92



✓ **Stainless Steel motor**

✓ **Cast iron components with cataphoresis coating**

**Cable length 10 m**  
(single-phase pumps with plug)

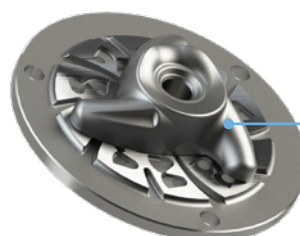
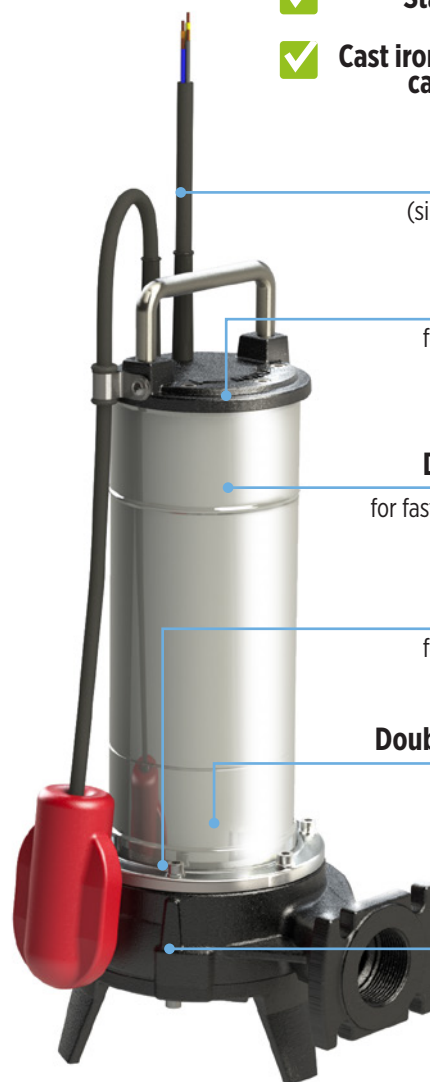
**Quick connectors**  
for an easy maintenance

**Dry chamber motor**  
for fast and easy maintenance

**Motor connection without tie bolts**  
for an easy maintenance

**Double mechanical seal**  
(pump side SiC/SiC)

**Grinder unit**  
to cut in small pieces threadlike materials contained in the liquids



**Grinder unit**



Pumping of clear non-loaded fluids



Extraction of water from ponds, streams or pits and for rainwater collection



Wastewater (food and paper industries)



Pumping of wastewater from residential buildings in areas not connected to the main sewer network

# FGX Series – Submersible Grinder pumps

## PRODUCT IDENTIFICATION CODE

40 FG... - 5 2 - 1,8 T - G

- Empty (without float switch); "G" (with float switch)
- Phases: "M" (Single-phase); "T" (Three-phase)
- Rated power [kW]
- No. of poles: "2" (2 poles)
- Frequency: "5" (50 Hz), "6" (60 Hz)
- Pump model: FGX (Franklin GRinder InoX)
- Ø discharge [mm]: "40" (40 mm)

004011/05/2016

## GENERAL FEATURES

Materials/Constr.design		
Impeller	Cast iron EN GJL200	
External casing	Stainless steel AISI304	
Pump body	Cast iron EN GJL200 with cataphoresis coating	
Cover	Cast iron EN GJL200 with cataphoresis coating	
Grinder unit	Hardened stainless steel	
Mechanical seal	motor side	Graphite/Ceramic
	pump side	Silicon carbide (SiC/SiC)
Motor shaft	Stainless steel AISI416	
Power cable	Type	10 m H07RN8-F
	Single-phase	4G1mm <sup>2</sup> with SHUKO plug (CEE7/VII), box with manual overload cut-out and with starting and Starting capacitors
	Three-phase	4G1mm <sup>2</sup>
Motor		
Constr.design	asynchronous squirrel cage-type in dry chamber	
Type	2 poles; 50 Hz	
Insulation class	F	
Protection degree	IP68	
Voltage	Single-phase	230 V ±6% built-in overheating protection, built in capacitor
	Three-phase	230V ±10%, 400V ±10%
Operating limits		
Maximum liquid temperature	+40 °C	
pH of pumped liquid	6- 10	
Liquid density	1,0 kg/dm <sup>3</sup>	
Maximum immersion depth	5 m	
Min. immersion depth for continuous service	353 mm	
Max. number of starting/hour	20	
Construction options		

- 60 Hz version
- Different voltages
- Food-grade white oil

# 40FGX-52

## HYDRAULIC PERFORMANCE 50 HZ

Pump model	Q = Delivery							
	l/sec 0	0,5	1	1,5	2	2,5	3	3,5
	m <sup>3</sup> /h 0	1,8	3,6	5,4	7,2	9	10,8	12,6
	US gpm 0	7,9	15,8	23,7	31,7	39,6	47,5	55,5
H = Total meters head of water column [m]								
40FGX-52-0,75	18,5	17,4	16,2	14	11,6	8,5	1,3	
40FGX-52-1,1	21	19,7	18,5	16,6	14,2	11,2	7,8	1

Application range

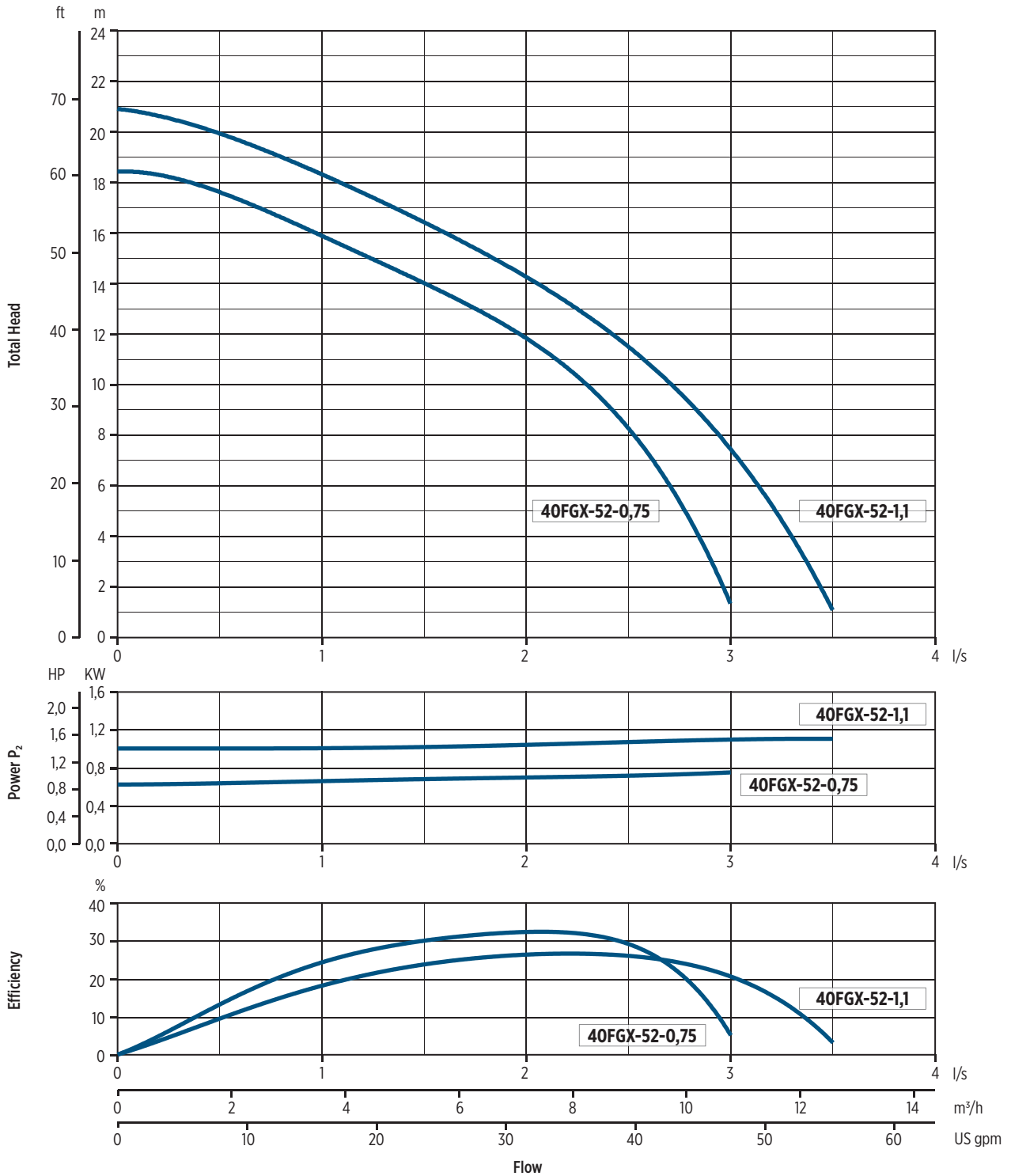
## TECHNICAL DATA

Pump model	Motor absorbed power P <sub>1</sub>	Rated power P <sub>2</sub>		Voltage	Rated current	Phases	Power cable		Float switch	Starting capacitor	Discharge port	Weight [kg]
	[kW]	[kW]	[HP]	[V]	[A]		Length [m]	Type		[μF]		
40FGX-52-0,75M	0,9	0,75	1	230	4,8	1 ~	10	4G1	-	20	G1½	18
40FGX-52-0,75M-G	0,9	0,75	1	230	4,8	1 ~	10	4G1	•	20	G1½	18
40FGX-52-0,75T	0,9	0,75	1	400	1,8	3 ~	10	4G1	-	-	G1½	18
40FGX-52-1,1M	1,4	1,1	1,5	230	6	1 ~	10	4G1	-	25	G1½	20
40FGX-52-1,1M-G	1,4	1,1	1,5	230	6	1 ~	10	4G1	•	25	G1½	20
40FGX-52-1,1T	1,4	1,1	1,5	400	2,1	3 ~	10	4G1	-	-	G1½	20

"-" = not available  
 "•" = available

# 40FGX-52

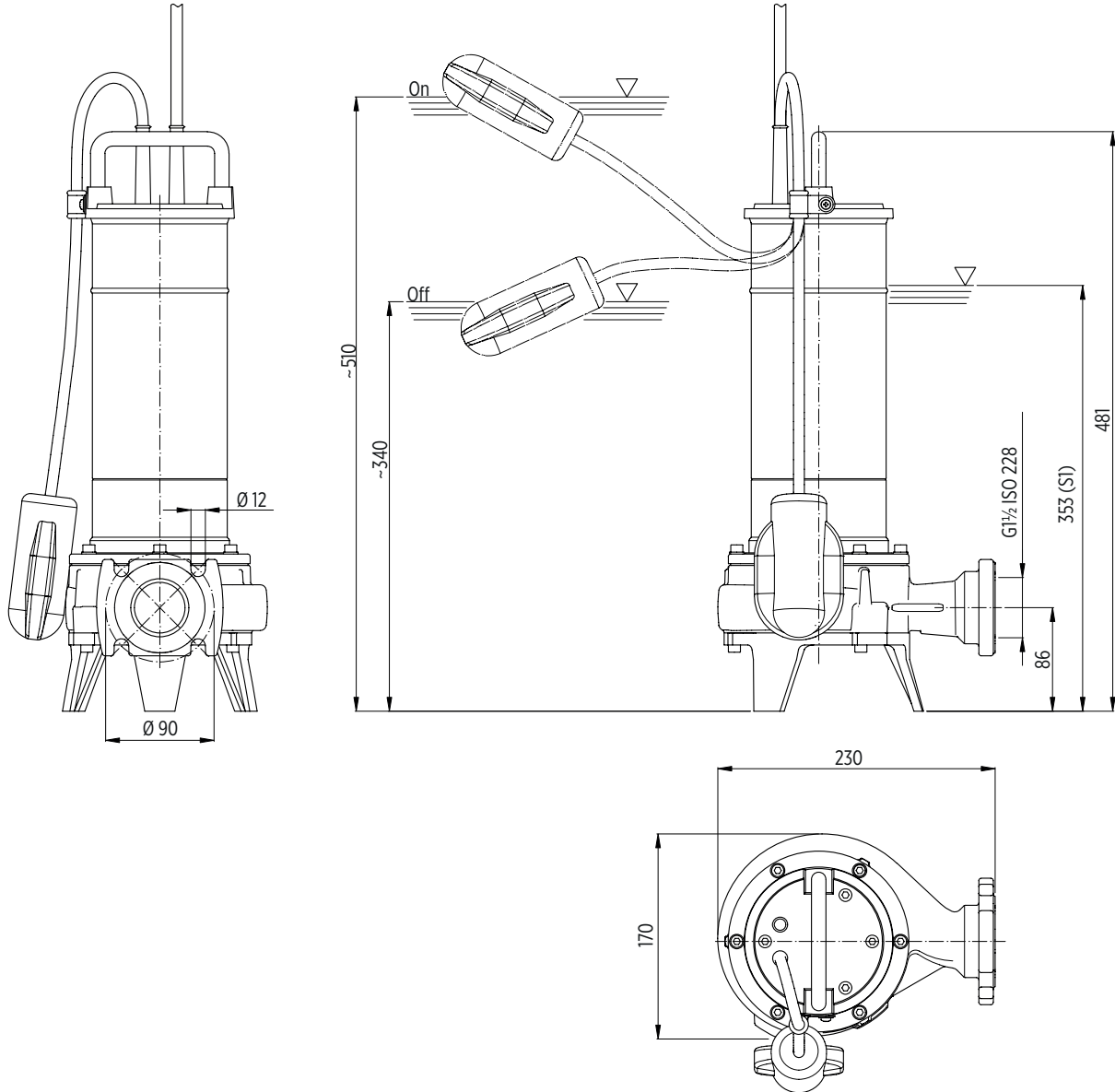
## PERFORMANCE CURVES AT 50 HZ



0010321.05/2016

# 40FGX-52

## DIMENSIONS



00130360 03/2026

Package		
Pump model	Dimensions [mm]	Weight [kg]
40FGX-52-0,75	255x205x560	18,7
40FGX-52-1,1		20,7

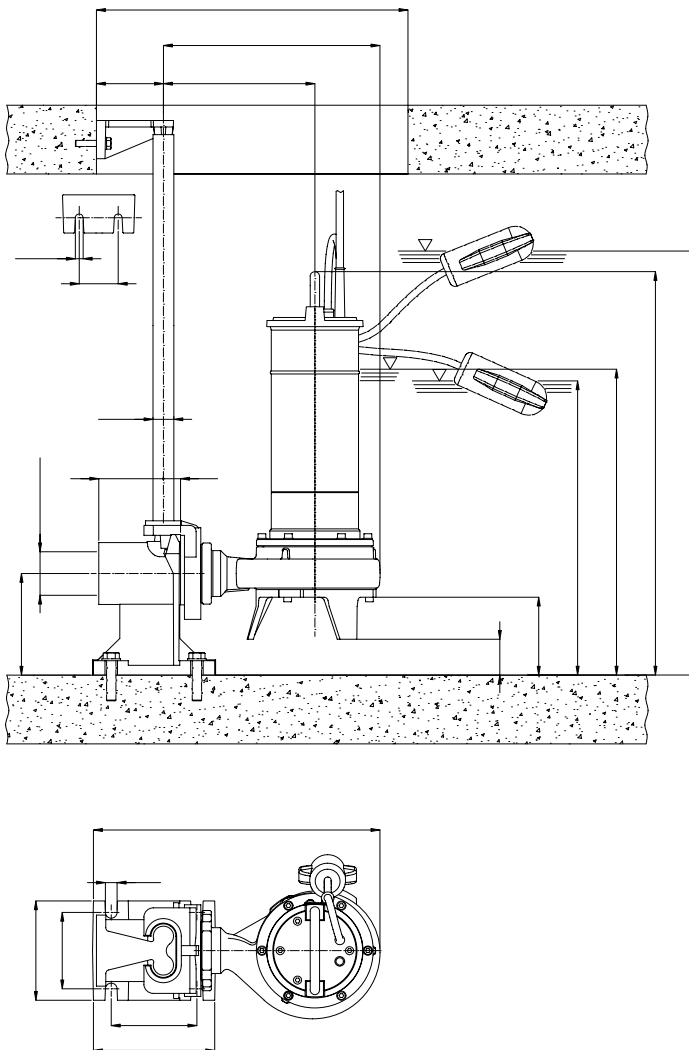
Pallet			
Pump model	Dimensions [mm]	N° of pumps	Weight [kg]
40FGX-52-0,75	800x1200x700	15	300
40FGX-52-1,1			325

# 40FGX-52

## INSTALLATION

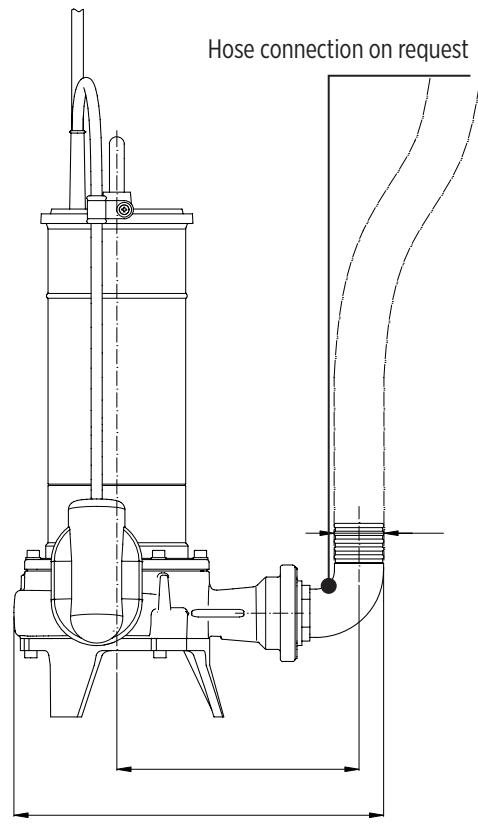
### Permanent installation with coupling system

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.



### Transportable installation

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



00103569.037026

## 50FGR Series – Submersible Grinder pumps

- Pump model:
  - 50FGR-52 (discharge port Ø 50 mm)
- Impeller with grinder unit for cutting threadlike and fibrous materials in the pumped liquid
- Available with or without adjustable float switch
- Double mechanical seal
- Fully cast iron construction
- Single-phase version up to 1.1 kW with built-in thermal protector
- Control panel with motor protection, manual reset, and starting/Starting capacitors
- Wide range of accessories available
- Stainless steel handle

### Technical data

- Flow: up to 18 m<sup>3</sup>/h
- Total Head: up to 34 m
- Motor power: 1.1 - 2.2 kW
- Minimum immersion depth:
  - 373 mm (50FGR-52-1,1M/T)
  - 440 mm (50FGR-52-1,6M/T, 50FGR-52-2,2T)
- Maximum immersion depth: 5 m

### ACCESSORIES

- Hose connection elbow
- Threaded elbow
- Threaded flange kit
- Coupling system
- Chain AISI316
- Shackle AISI316
- Sacrificial anodes belt
- For more information about accessories see p. 92



✓ **Construction in Cast iron**  
to withstand harsh conditions



**Cable length 10 m**  
(single-phase pumps with plug)

**2 poles motor**

**Double mechanical seal**

**Elbow G2"**  
included in the package

**Grinder unit**  
to cut in small pieces threadlike materials contained in the liquids

**Grinder unit**



Pumping of clear non-loaded fluids



Extraction of water from ponds, streams or pits and for rainwater collection



Wastewater (food and paper industries)



Pumping of wastewater from residential buildings in areas not connected to the main sewer network

# 50FGR Series – Submersible Grinder pumps

## PRODUCT IDENTIFICATION CODE

50 FGR - 5 2 - 1,8 T - G

- “Empty” (without float switch); “G” (with float switch)
- Phases: “M” (Single-phase); “T” (Three-phase)
- Rated power [kW]
- No. of poles: “2” (2 poles)
- Frequency: “5” (50 Hz), “6” (60 Hz)
- Pump model: FGR (Franklin GRinder)
- Ø discharge [mm]: “50” (50 mm)

00140087 05/2026

## GENERAL FEATURES

Materials/Constr.design		
Impeller	Cast iron EN GJL200	
External casing	Cast iron EN GJL200	
Pump body	Cast iron EN GJL200	
Cover	Cast iron EN GJL200	
Grinder unit	Stainless steel AISI431	
Mechanical seal	motor side	Graphite/Alumina
	pump side	Silicon carbide (SiC/SiC)
Motor shaft	Stainless steel AISI431	
Power cable	Type	10 m H07RN-F
	Single-phase	4G1mm <sup>2</sup> with SHUKO plug (CEE7/VII), box with manual overload cut-out and with starting and operating capacitors
	Single-phase	4G2,5mm <sup>2</sup> with SHUKO plug (CEE7/VII), box with manual overload cut-out and with starting and operating capacitors
	Three-phase	4G1,5mm <sup>2</sup>
Motor		
Constr.design	asynchronous squirrel cage-type oil filled	
Type	2 poles; 50 Hz	
Insulation class	F	
Protection degree	IP68	
Voltage	Single-phase	230V ±6% built-in overheating protection (up to 1,1 kW)
	Three-phase	230V ±10%, 400V ±10%
Operating limits		
Maximum liquid temperature	+40 °C	
pH of pumped liquid	6- 10	
Liquid density	1,0 kg/dm <sup>3</sup>	
Maximum immersion depth	5 m	
Min. immersion depth for continuous service	50FGR-52-1,1M/T	373 mm
	50FGR-52-1,6M/T	440 mm
	50FGR-52-2,2T	
Max. number of starting/hour	20	
Construction options		

- 60 Hz version
- Different voltages
- Food-grade white oil

# 50FGR-52

## HYDRAULIC PERFORMANCE 50 HZ

Pump model	Q = Delivery										
	l/sec 0	0,5	1	1,5	2	2,5	3	3,5	4	4,5	5
	m <sup>3</sup> /h 0	1,8	3,6	5,4	7,2	9	10,8	12,6	14,4	16,2	18
	US gpm 0	7,9	15,8	23,7	31,7	39,6	47,5	55,5	63,4	71,3	79,2
H = Total meters head of water column [m]											
50FGR-52-1,1	21	19	17	15,8	14	12	9,5	8,8	7,8	5,8	2
50FGR-52-1,6	27	25	21	20,5	19	18	15,5	14,5	13	10	5
50FGR-52-2,2	34	32	29,5	27,5	25,7	23,8	22	20	17,5	15	10

 Application range

## TECHNICAL DATA

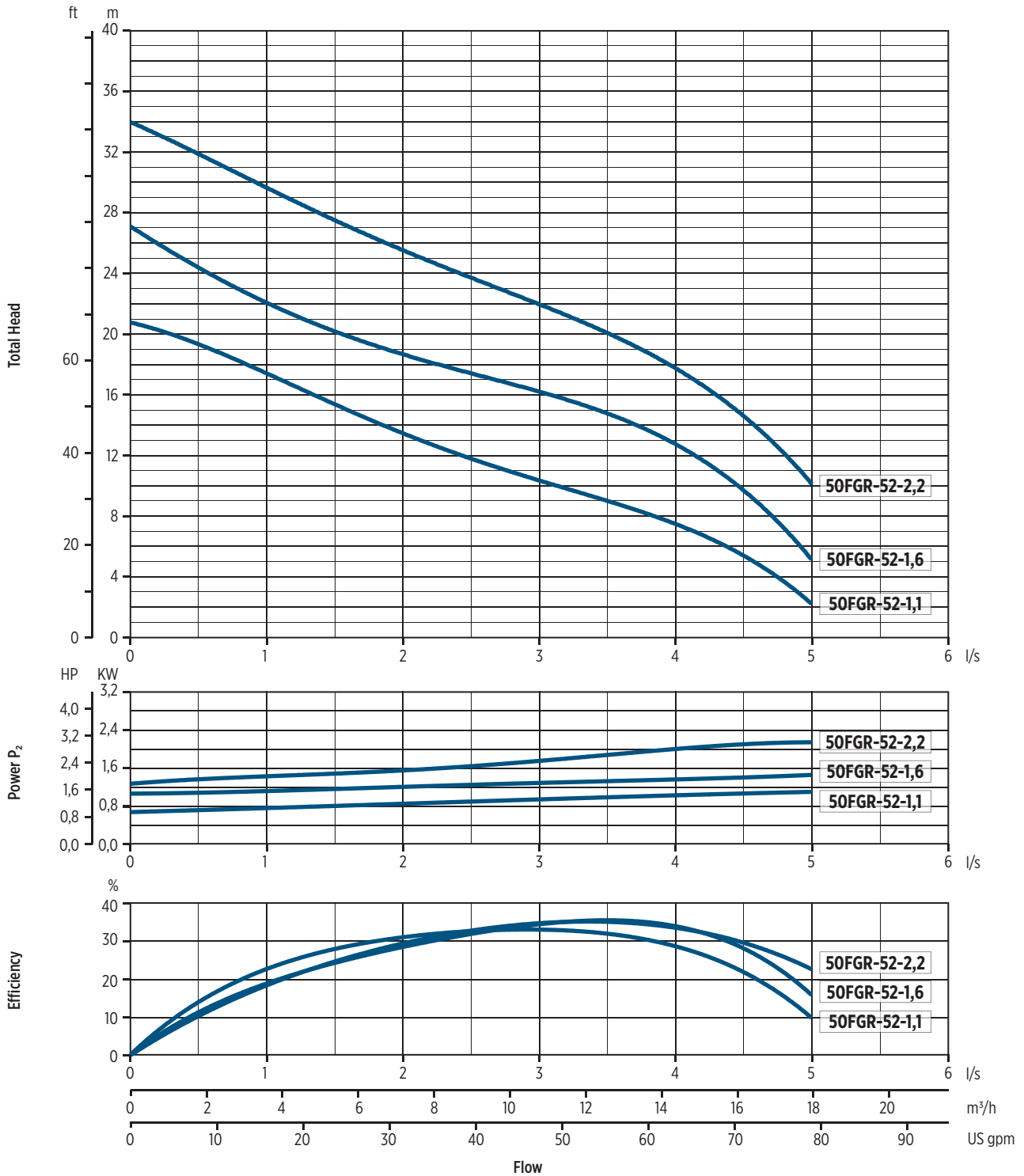
Pump model	Motor absorbed power P <sub>1</sub>		Rated power P <sub>2</sub>		Voltage [V]	Rated current [A]	Phases	Power cable		Float switch	Starting capacitor [μF]	Discharge port	Weight [kg]
	[kW]	[HP]	[kW]	[HP]				Length [m]	Type				
50FGR-52-1,1M	1,4	1,1	1,5	1,5	230	7	1 -	10	4G1,5	-	30	G2 (Ø50)	34
50FGR-52-1,1M-G	1,4	1,1	1,5	1,5	230	7	1 -	10	4G1,5	•	30	G2 (Ø50)	34
50FGR-52-1,1T	1,4	1,1	1,5	1,5	400	11	3 -	10	4G2,5	-	-	G2 (Ø50)	34
50FGR-52-1,1T-G	1,4	1,1	1,5	1,5	400	11	3 -	10	4G2,5	•	-	G2 (Ø50)	34
50FGR-52-1,6M	2,3	1,6	2,1	2,1	230	3	1 -	10	4G1,5	-	40	G2 (Ø50)	40
50FGR-52-1,6M-G	2,3	1,6	2,1	2,1	230	3	1 -	10	4G1,5	•	40	G2 (Ø50)	40
50FGR-52-1,6T	2,3	1,6	2,1	2,1	400	4	3 -	10	4G1,5	-	-	G2 (Ø50)	40
50FGR-52-1,6T-G	2,3	1,6	2,1	2,1	400	4	3 -	10	4G1,5	•	-	G2 (Ø50)	40
50FGR-52-2,2T	3,1	2,2	3	3	400	5	3 -	10	4G1,5	-	-	G2 (Ø50)	42

“-” = not available

“•” = available

# 50FGR-52

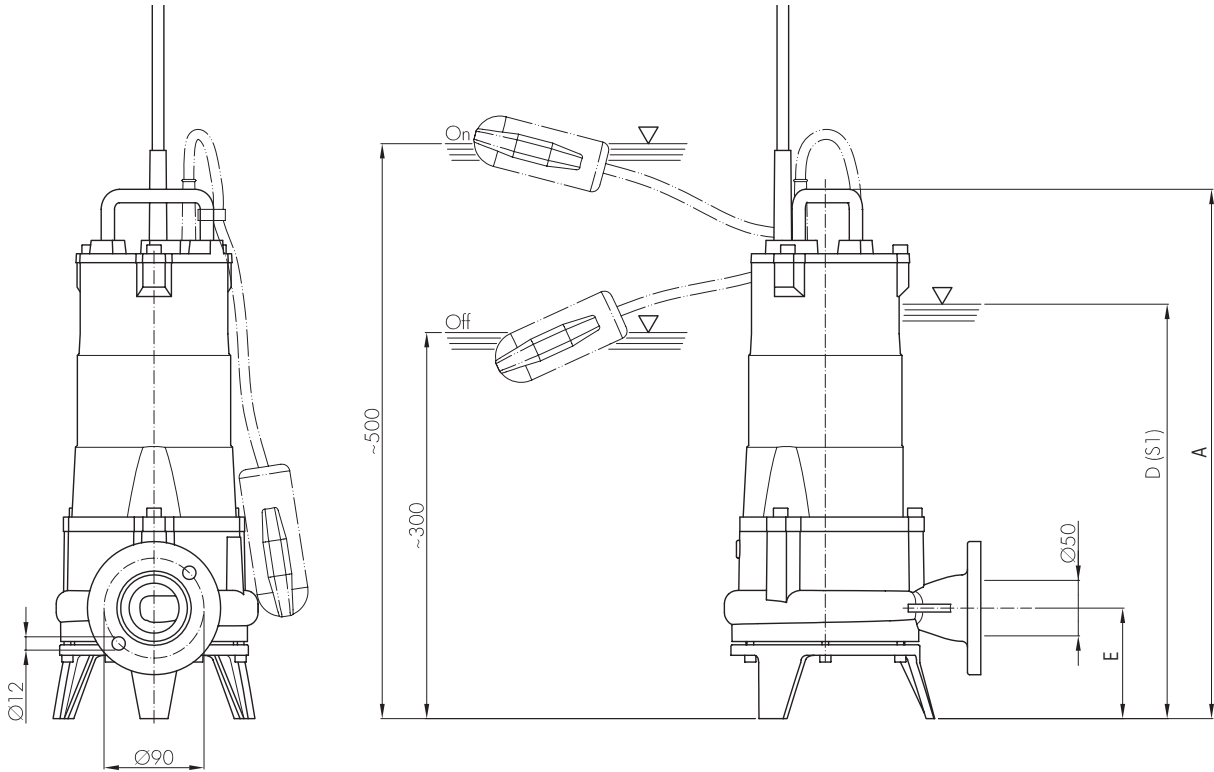
## PERFORMANCE CURVES AT 50 HZ



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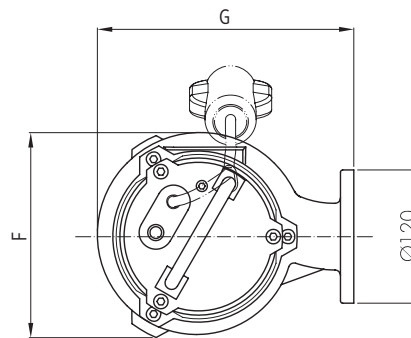
# 50FGR-52

## DIMENSIONS



Pump model	Dimensions [mm]				
	A	D	E	F	G
50FGR-52-1,1	477	373	100	185	231
50FGR-52-1,6	550	440	110	220	276
50FGR-52-2,2	550	440	110	220	276

Package		
Pump model	Dimensions [mm]	Weight [kg]
50FGR-52-1,1	290x245x585	35
50FGR-52-1,6	300x260x585	41
50FGR-52-2,2		43



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# 50FGR-52

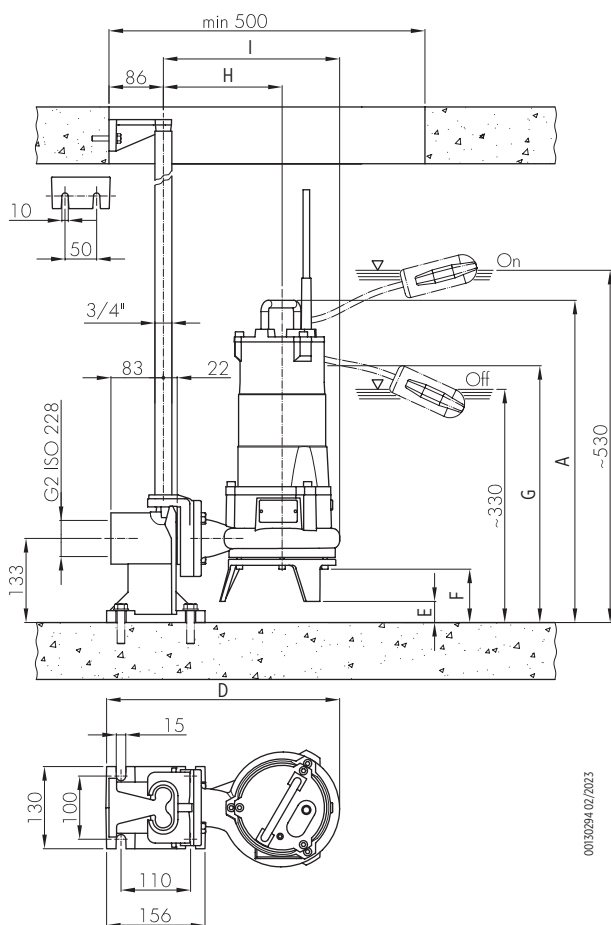
## INSTALLATION

### Permanent installation with coupling system

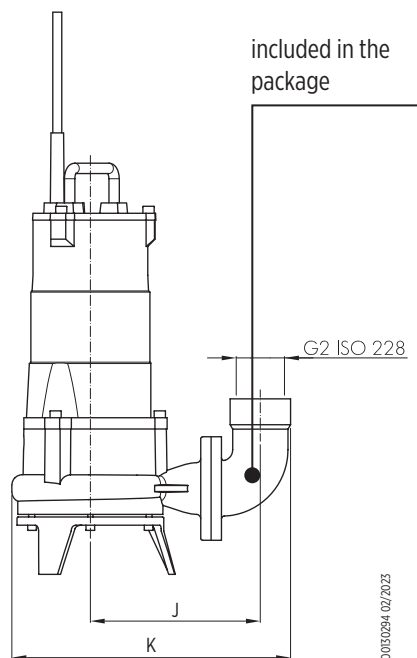
It is the recommended installation for the permanent pumping station. The electric pump is guided by two pipes and it is connected automatically to the coupling system. The quick connection ensures that the pump can be easily removed and re-installed.

### Transportable installation

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



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Pump model	Installation dimensions [mm]								
	A	D	E	F	G	H	I	J	K
50FGR-52-1,1	510	370	34	85	407	193	279	197	232
50FGR-52-1,6	574	414	24	76	464	215	324	224	368
50FGR-52-2,2	574	414	24	76	464	215	324	224	368



# D.C. motor pumps 50 Hz

FLV SERIES



## FLV Series – D.C. motor submersible wastewater pumps

- Pump models – discharge Ø 40 mm:
  - 40FLV-24 (24V)
  - 40FLV-12 (12V)
- Vortex impeller (V)
- Available with or without suction strainer
- Mechanical seal in Graphite/Ceramic
- DC permanent magnet motor in dry chamber
- Stainless steel handle
- 12 V model supplied with 10 m cable and clamp terminals

### Technical data

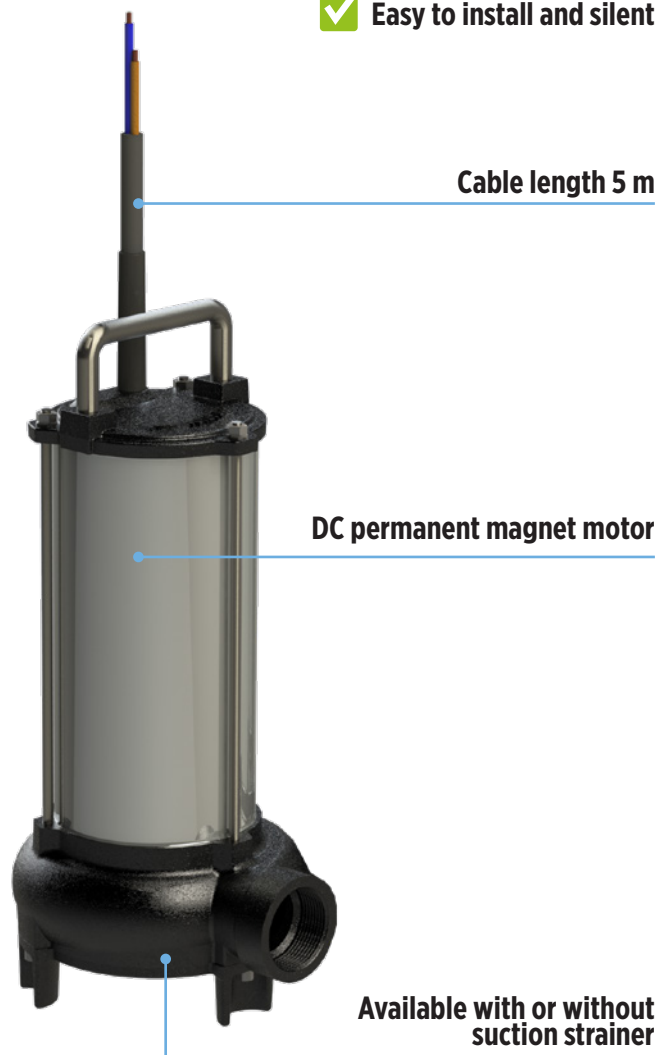
- Flow: up to 20 m<sup>3</sup>/h
- Total Head: up to 12 m
- Motor power: 0.3 - 0.75 kW
- Minimum immersion depth:
  - 300 mm (40FLV-24-0,3, 40FLV-12-0,3, 40FLV-24-0,5)
  - 350 mm (40FLV-24-0,75)
- Maximum immersion depth: 2 m
- Free passage: 20 mm

### ACCESSORIES

- Hose connection elbow
- Threaded flange kit
- Chain AISI316
- Shackle AISI316
- For more information about accessories see p. 92



✓ Easy to install and silent



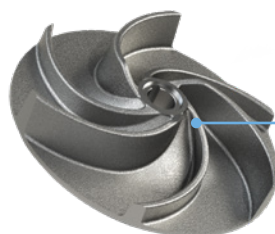
Drainage



Domestic / Industrial grey water



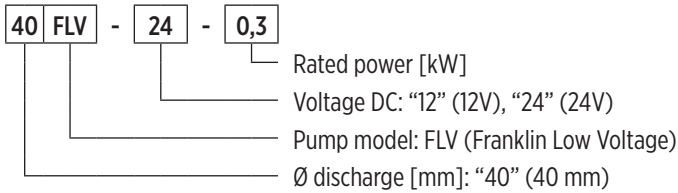
Pumping water from road drainage wells, basements, and off-grid sites without mains power



Vortex impeller (V)

# FLV Series - D.C. motor submersible wastewater pumps

## PRODUCT IDENTIFICATION CODE



00140088 01/2026

## GENERAL FEATURES

Materials/Constr.design	
Impeller	Cast iron EN GJL200
External casing	Stainless steel AISI304
Pump body	Cast iron EN GJL200
Mechanical seal	motor side 40FLV-24-0,3, 40FLV-24-0,5, 40FLV-24-0,75
	motor side 40FLV-24-0,3, 40FLV-24-0,5, 40FLV-24-0,75
	pump side 40FLV-12-0,3
Motor shaft	Stainless steel AISI416
Power cable	5 m H07RN-F type, 2x6mm <sup>2</sup>
Motor	
Constr.design	D.C. permanent magnet in dry chamber
Insulation class	F
Protection degree	IP68
Main voltage values and relative tolerance in relation to the rated voltage value:	24V C.C. +10% / -5% 12V C.C. +10% / -5%
Operating limits	
Maximum liquid temperature	+40 °C
pH of pumped liquid	6 - 10
Liquid density	1,0 kg/dm <sup>3</sup>
Free passage	20 mm
Min. immersion depth for continuous service	40FLV-24-0,3, 40FLV-12-0,3, 40FLV-24-0,5
	40FLV-24-0,75
Max. number of starting/hour	20
Construction options	

- Mechanical seal in Silicon carbide (SiC/SiC)
- Model 40FLV-12-0,3 with 10 m 1x16mm<sup>2</sup> cable and battery clamps
- Inlet with strainer (free passage 8 mm)

# 40FLV

## HYDRAULIC PERFORMANCE 50 HZ

Pump model	Q = Delivery											
	l/sec 0	0,5	1	1,5	2	2,5	3	3,5	4	4,5	5	5,5
	m <sup>3</sup> /h 0	1,8	3,6	5,4	7,2	9	10,8	12,6	14,4	16,2	18	19,8
	US gpm 0	7,9	15,8	23,7	31,7	39,6	47,5	55,5	63,4	71,3	79,2	87,2
H = Total meters head of water column [m]												
40FLV-24-0,3	8	7	6,2	5,3	4,3	3,2	2,1	1				
40FLV-24-0,5	10,9	9,7	8	7,1	6,8	6	5	3,9	2,9	1,5		
40FLV-24-0,75	12	11	10	9	8	7	5,8	5,1	4,5	3,9	3	2
40FLV-12-0,3	7,5	7	6	5	4	3,1	2,5	2	0,8			

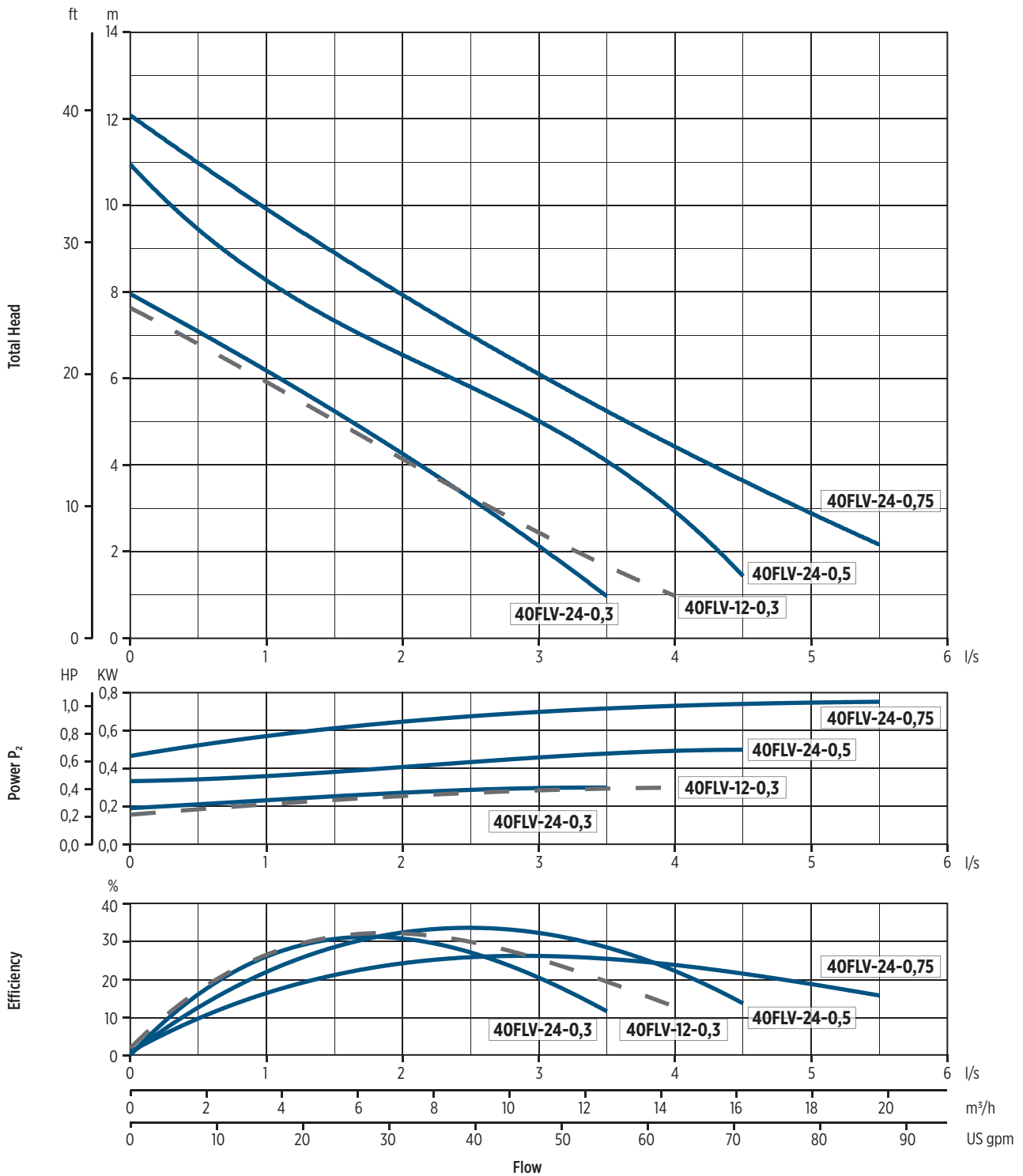
Application range

## TECHNICAL DATA

Pump model	Motor absorbed power P <sub>1</sub>	Rated power P <sub>2</sub>		Voltage	Rated current	Power cable		Discharge port	Weight [kg]
	[kW]	[kW]	[HP]	[V]	[A]	Length [m]	Type		
40FLV-24-0,3	0,4	0,3	0,4	24CC	17	5	2X6	G1½	11
40FLV-24-0,5	0,62	0,5	0,7	24CC	26	5	2X6	G1½	12
40FLV-24-0,75	0,84	0,75	1	24CC	35	5	2X6	G1½	17
40FLV-12-0,3	0,4	0,3	0,4	12CC	34	5	2X6	G1½	11

# 40FLV

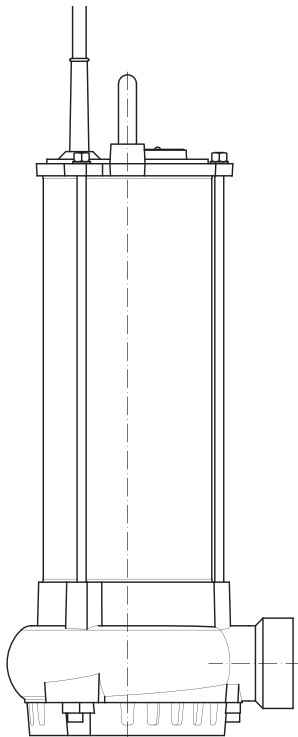
## PERFORMANCE CURVES AT 50 HZ



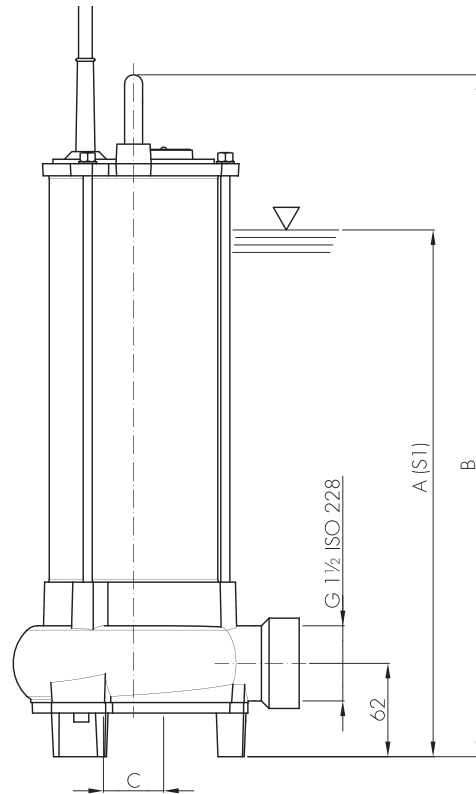
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# 40FLV

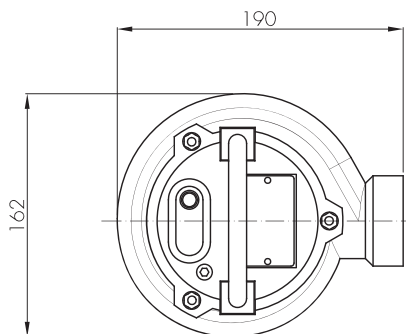
## DIMENSIONS



Version with filter on request



Dimensions [mm]			
Pump model	A	B	C
40FLV-24-0,3	300	402	30
40FLV-24-0,5	300	402	30
40FLV-24-0,75	350	453	40
40FLV-12-0,3	300	402	30



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Package		
Pump model	Dimensions [mm]	Weight [kg]
40FLV-24-0,3	220x180x450	11,5
40FLV-24-0,5		12,5
40FLV-24-0,75	220x200x450	17,7
40FLV-12-0,3	220x180x450	11,5

Pallet			
Pump model	Dimensions [mm]	N° of pumps	Weight [kg]
40FLV-24-0,3	800x1200x800	32	400
40FLV-24-0,5		32	440
40FLV-24-0,75		24	460
40FLV-12-0,3		32	400



## Accessories

Accessories type	FWX Series			FWC Series			FGX Series	FGR Series	FLV Series
	40FWX	50FWX	50FWC	65FWC	80FWC	100FWC	40FGX	50FGR	40FLV
Hose connection 	-	G2"M - Ø50 908616B	G2"M - Ø50 908616B	-	-	-	-	G2"M - Ø50 908616B	-
Hose connection elbow 	G1"1/2M - Ø40mm 8640XB	-	-	-	-	-	G1"1/2M - Ø40mm 8640XB	-	G1"1/2 M - Ø40mm 8640XB
Threaded elbow 	Ø50 - G2"F 908658	Ø50 - G2"F 908658	Ø50 - G2"F 908658 (included)	-	-	-	Ø50 - G2"F 908658	Ø50 - G2" F 908658 (included)	-
Threaded flange kit 	G2"F 908719	G2"F 908719	G2" F 908719	-	-	-	G2"F 908719	G2" F 908719	-
Base frame 	-	-	-	-	DN80 & DN100 308603	DN80 & DN100 308603	-	-	-
Competitor replacement adapter 	-	DN50 - DN50 908639	DN50 - DN50 908639	DN65 - DN65 908641	DN80 - DN80 908644	DN100 - DN100 908646	-	-	-
Storz coupling 	-	DN52(C)/ G2"M 208630B	DN52(C)/ G2" M 208630B	-	-	-	-	-	-
Coupling system 	Ø50 - 2"F 958601	Ø50 - 2"F 958601	Ø50 - G2" F 958601	DN65 - G2"1/2 F 908634	DN80 - DN80 908622	DN100 - DN100 908624	Ø50 - G2" F 958601	Ø50 - G2" F 958601	G1"1/2 - G2" F 958603
Chain AISI316 	5m x Ø5mm 353910B	5m x Ø5mm 353910B	5m x Ø5mm 353910B	5m x Ø5mm 353910B	5m x Ø6mm 353911B	5m x Ø6mm 353911B	5m x Ø5mm 353910B	5m x Ø5mm 353910B	5m x Ø5mm 353910B
Shackle AISI316 	Ø6mm 353901B	Ø6mm 353901B	Ø6mm 353901B	Ø6mm 353901B	Ø10mm 353902B	Ø10mm 353902B	Ø6mm 353901B	Ø6mm 353901B	Ø6mm 353901B
Sacrificial anodes belt 	-	-	908712	908712	-	-	-	908712	-

## Accessories

Accessories type		5m	10m	15m	20m
Float switch for clear water		902604B	902601B	902612B	902603B
Float switch for sewage		902609B	902605B	902606B	902607B

## CATALOG REVISION CHANGES NOTICE

Rev. No.	Changes	Page
01	40FGR Technical data correction	84
02	Model correction: from "50FWC-V-54-1,5" to "50FWC-V-54-1,1"	38-42
03	Deleted sentence "Hose connection on request" from 50FWC and 50FGR	30, 36, 42, 92
	40FGR General Features data table correction about power cable single-phase	82
	50FGR General Features data table correction about power cable single-phase	88
	50FWC-V-52-1,6M power cable single-phase correction to "4G2,5mm <sup>2</sup> , capacitor box and SCHUKO plug (CEE 7/VII)"	38
	50FWC V and 50FWC M Technical data correction from "0,75 HP" to "1,2 HP"	28, 34
	50FGR (50FGR-52-1,1T, 50FGR-52-1,1T-G, 50FGR-52-1,6M, 50FGR-52-1,6M-G) Technical data correction: Motor absorbed Power P1 and Rated Power P2	90
	50FGR Technical data correction - Starting capacitor section	90
	32FWS V, 40FWS V, 50FWS V General Features motor voltage single-phase correction	8, 14, 20
04	Added ED-EGT/EGF drainage pump models	5-16
	"EDV Hydraulic Performance 50 Hz ≈ 2900 l/min" section removed	10
	"EGN - Submersible Drainage Pumps for Clean Water" section removed	All
	Updated tables	6, 8, 10, 14, 15, 16
	Product identification code section modified	6
	EGN model removed	All
	EDV model removed	All
	"HH" (High Head version) deleted from FWS-FWC series Product identification code	18
	50FWC V General Features update: voltage single-phase	38
	50FWC M General Features update: voltage single-phase	44
	50FWC V4 General Features update: voltage single-phase	50
	65FWC V4 General Features update: voltage single-phase	68
	50FGR Technical Data table update	102
05	Product identification code section modified	6
	ED General Features update: power cable, motor standard voltage	6
	ED dimensions and weights data table update	8
	ED Hydraulic Performance three-phase data table deleted	10
07	Deleted FWS Series and 40 FGR model	-
	Revised section structures	All
	Added FWX Series	19-28
	Added FGX Series	75-80-95-96
	Added accessories section	93-94









**Franklin Electric**



[franklinwater.eu](http://franklinwater.eu)

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