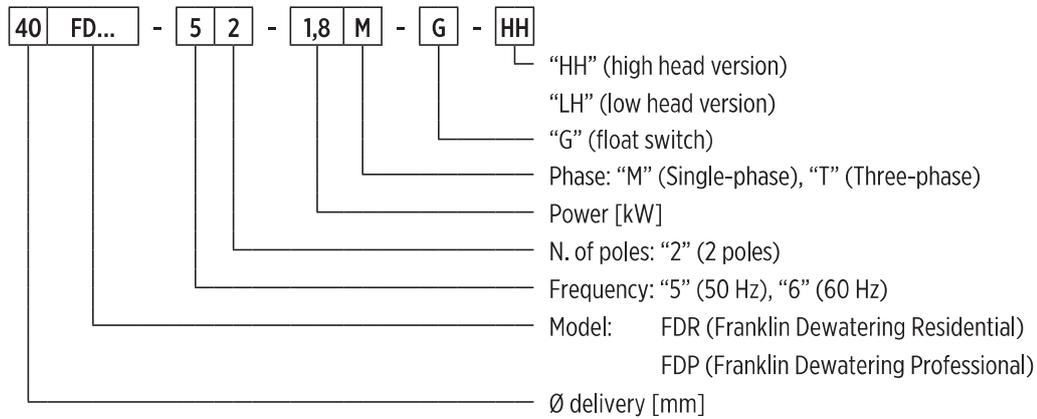


# FDR Series - Submersible pumps for residential drainage 50 Hz



# FDR SERIES - SUBMERSIBLE PUMPS FOR RESIDENTIAL DRAINAGE 50 HZ

## PUMP IDENTIFICATION CODE



00140089 04/2023

# 40FDR SERIES 50 HZ

## FEATURES & BENEFITS

### APPLICATIONS



Drainage and dewatering  
draining rooms, tank  
drainage



Rainwater Recovery



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

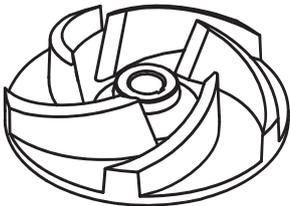


### MARKETS



### SUBMERSIBLE PUMPS FOR CLEAR AND TURBID WATER DRAINAGE

Submersible electric pumps in cast iron and stainless steel, suitable for draining clear and turbid waters. They can be used as ready-to-use portable pumps both for construction site use, basement wells, and for fixed installations with control panel.



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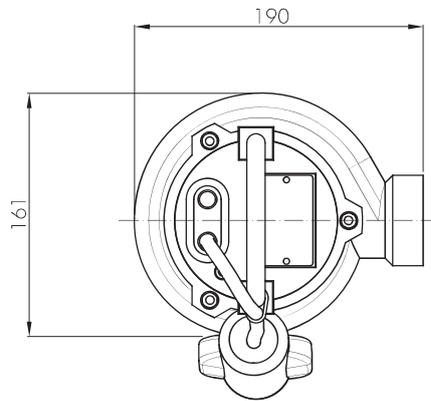
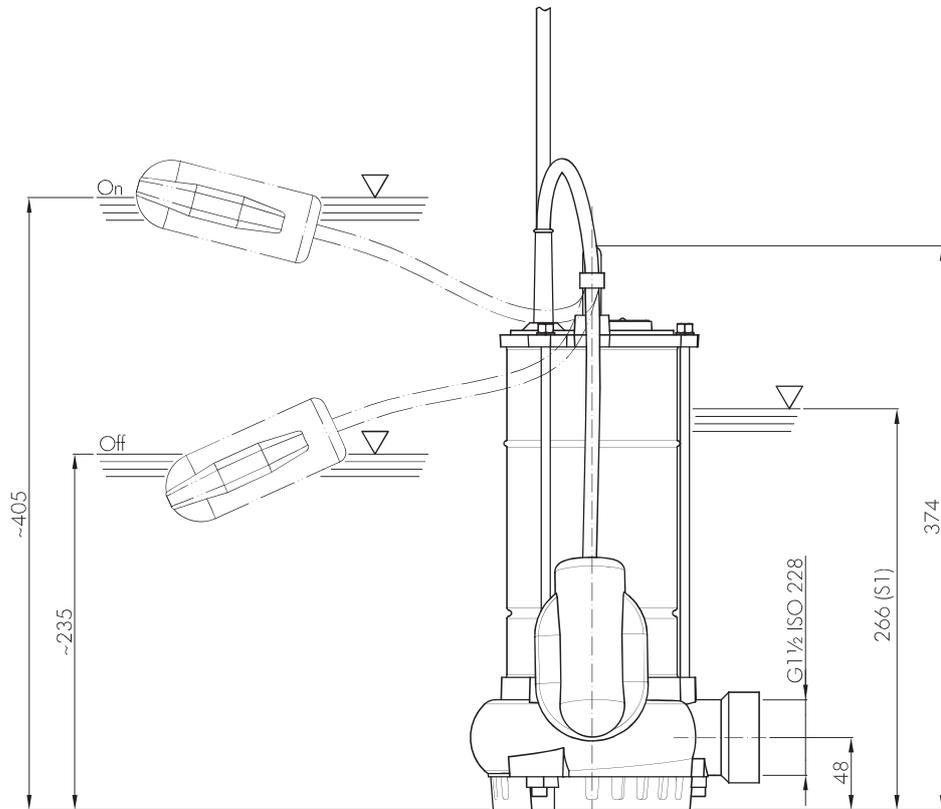
**OPEN IMPELLER**

## GENERAL FEATURES

		Materials/Constr.design
Open impeller		Cast iron EN GJL200
External casing		Stainless steel AISI304
Pump body		Cast iron EN GJL200
Cover		Cast iron EN GJL200
Filter		Aluminium alloy
Mechanical seal	motor side	Seal ring
	pump side	Graphite/Alumina
Motor shaft		Stainless steel AISI416
Power cable	Type	10 m H07RN-F type
	Single-phase	3G1mm <sup>2</sup> with SCHUKO plug (CEE 7/VII)
	Three-phase	4G1mm <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, built in capacitor, float switch as optional
	Three-phase	230V ±10%, 400V ±10%
		Limits of use
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		266 mm
Free passage		8 mm
Max. number of starting/hour		20
		Construction options

- 60 Hz version
- Different voltages
- Food-grade white oil
- Silicon carbide (SiC/SiC) mechanical seal

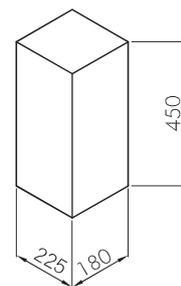
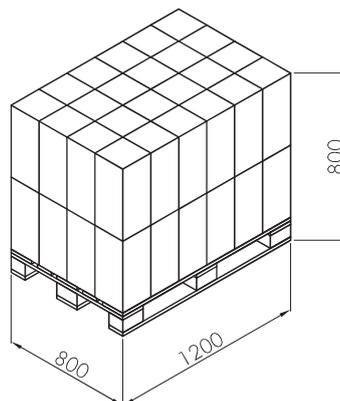
DIMENSIONAL DRAWINGS



00350297 04/7/2023

Packaging		
Pump model	Dimensions [mm]	Weight [kg]
40FDR	225x180x450	11,5

Pallet			
Pump model	Dimensions [mm]	N° of pumps	Weight [kg]
40FDR-52-0,37	1200x800x800	32	400
40FDR-52-0,6	1200x800x800	32	400
40FDR-52-0,7	1200x800x800	32	500



00350289 02/2/2023

## 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	Running capacitor	Delivery port	Weight [kg]
	[kW]	[kW]	[HP]	[V]	[A]		length [m]	Type		[μf]		
40FDR-52-0,37M	0,58	0,37	0,5	230	3	1~	10	3G1	-	8	G1½	11
40FDR-52-0,37M-G	0,58	0,37	0,5	230	3	1~	10	3G1	•	8	G1½	11
40FDR-52-0,6M	0,72	0,6	0,8	230	3,7	1~	10	3G1	-	10	G1½	11
40FDR-52-0,6M-G	0,72	0,6	0,8	230	3,7	1~	10	3G1	•	10	G1½	11
40FDR-52-0,7M	0,88	0,7	0,95	230	4,8	1~	10	3G1	-	14	G1½	14
40FDR-52-0,7T	0,88	0,7	0,95	400	1,8	3~	10	4G1	-	-	G1½	14
40FDR-52-0,7M-G	0,88	0,7	0,95	230	4,8	1~	10	3G1	•	14	G1½	14
40FDR-52-0,7T-G	0,88	0,7	0,95	400	1,8	3~	10	4G1	•	-	G1½	14

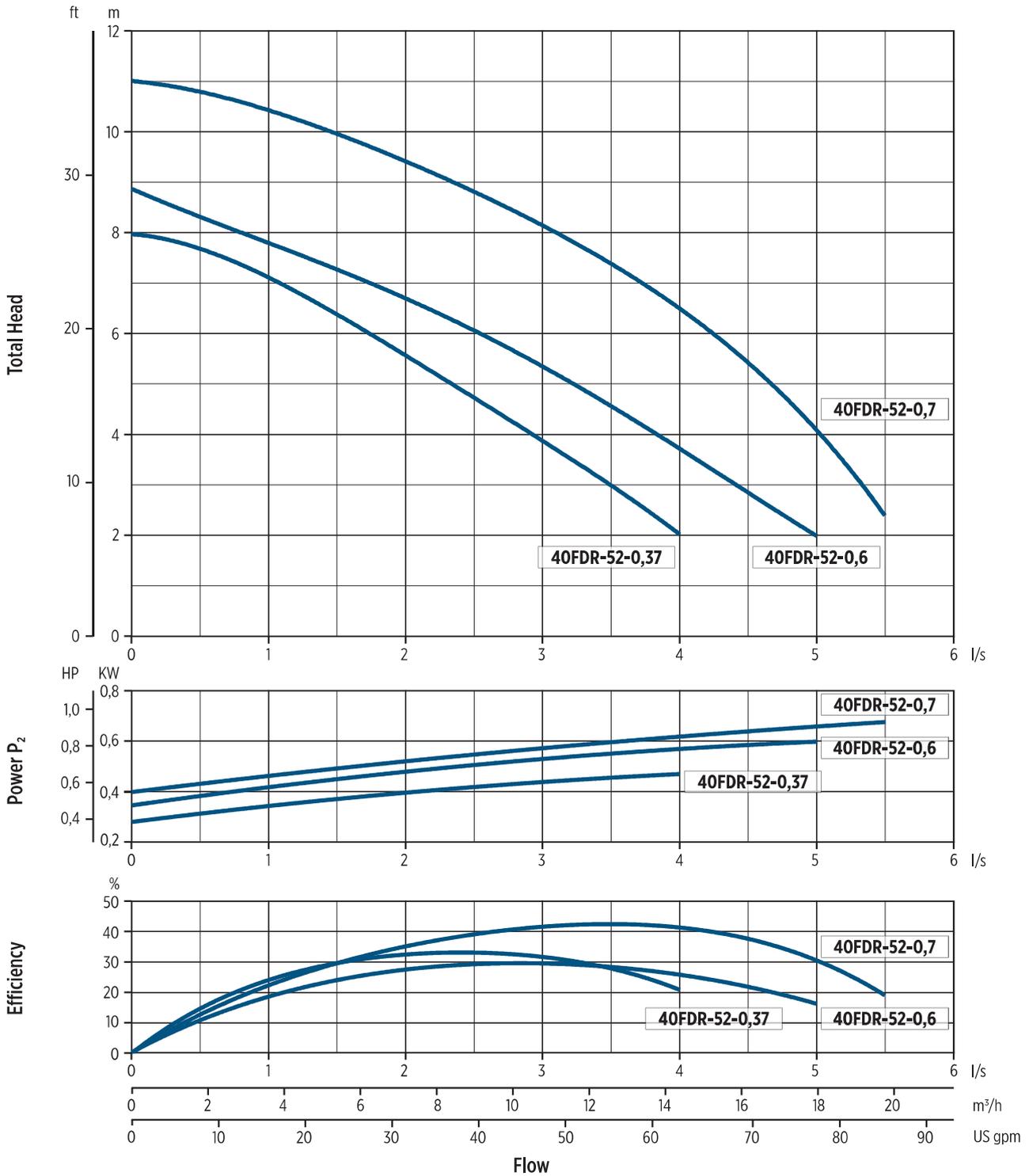
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## HYDRAULIC PERFORMANCE AT 50 HZ

Pump model	Phase	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]											
40FDR-52-0,37	1~	8	7,6	7,1	6,5	5,6	4,5	4	3	2			
40FDR-52-0,6	1~	8,9	8,2	8	7,1	6,8	6	5,4	4,5	3,8	2,8	2	
40FDR-52-0,7	1~	11	10,8	10,5	9,9	9,4	8,8	8,2	7,4	6,5	5,4	4,1	2,4
40FDR-52-0,7	3~	11	10,8	10,5	9,9	9,4	8,8	8,2	7,4	6,5	5,4	4,1	2,4

PERFORMANCE CURVES AT 50 HZ



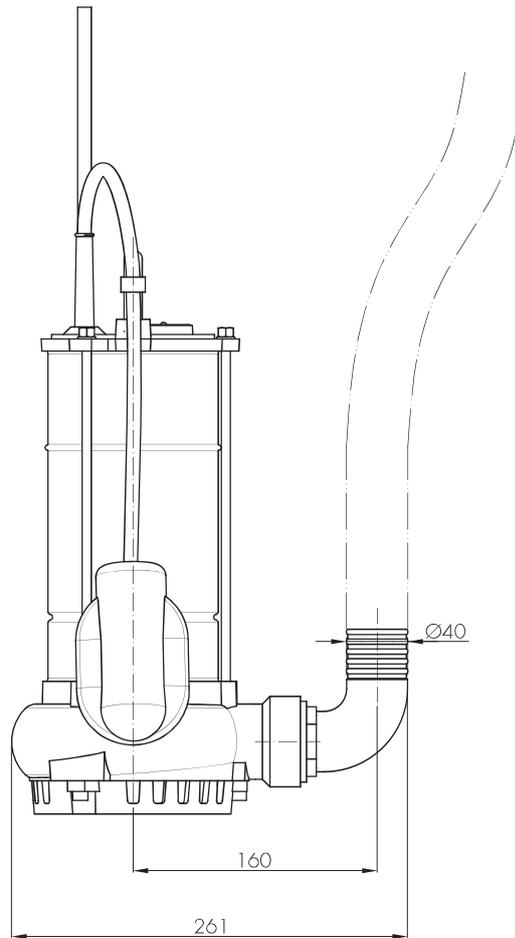
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## INSTALLATION

### INSTALLATION INSTRUCTIONS

#### TRANSPORTABLE INSTALLATION

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



0030297 04/2023

# 50FDR SERIES 50 HZ

## FEATURES & BENEFITS

### APPLICATIONS



Drainage and dewatering  
Draining rooms, tank  
drainage



Rainwater Recovery



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

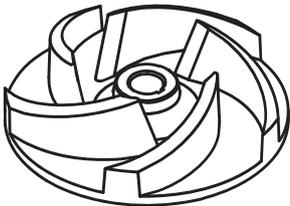


### MARKETS



### SUBMERSIBLE PUMPS FOR CLEAR AND TURBID WATER DRAINAGE

Submersible electric pumps in cast iron and stainless steel, suitable for draining clear and turbid waters. They can be used as ready-to-use portable pumps both for construction site use, basement wells, and for fixed installations with control panel.



00150305-04/2023

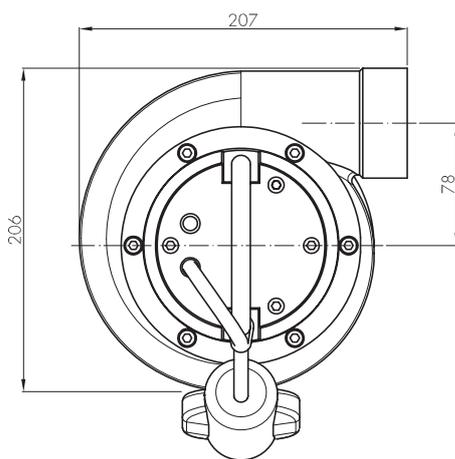
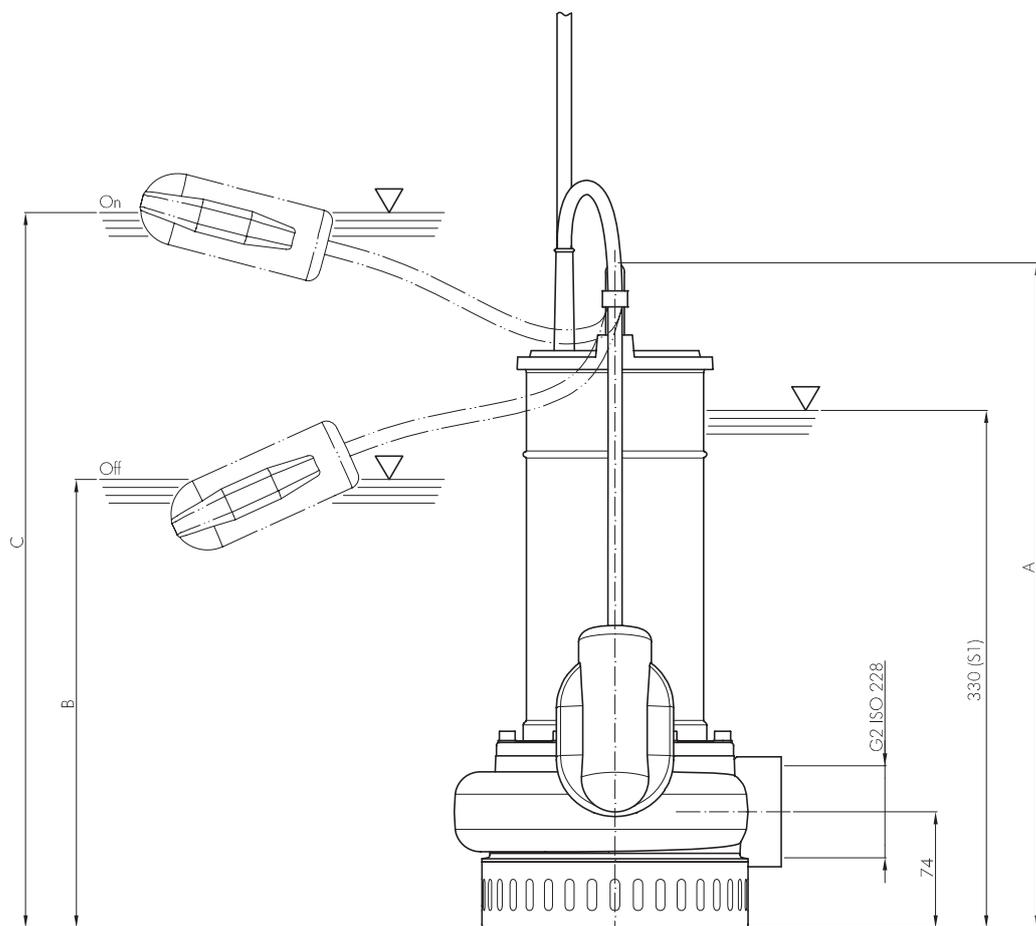
**OPEN IMPELLER**

## GENERAL FEATURES

		Materials/Constr.design
Open impeller		Cast iron EN GJL200
External casing		Stainless steel AISI304
Pump body		Cast iron EN GJL200
Cover		Cast iron EN GJL200
Filter		Stainless steel AISI304
Mechanical seal	motor side	Seal ring
	pump side	Silicon carbide (SiC/SiC)
Motor shaft		Stainless steel AISI420
Power cable	Type	10 m H07RN-F type
	Single-phase	3G1mm <sup>2</sup> with SCHUKO plug (CEE 7/VII)
	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	230V ±6% built-in overheating protection, built in capacitor, float switch as optional
	Three-phase	230V ±10%, 400V ±10%
		Limits of use
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		329 mm
Free passage		6 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

DIMENSIONAL DRAWINGS



00130298 04/2023

Pump model	Dimensions [mm]		
	A	B	C
50FDR-52-0,9	424	260	460
50FDR-52-1,4	449	285	485

Packaging		
Pump model	Dimensions [mm]	Weight [kg]
50FDR-52-0,9	255x205x560	18,7
50FDR-52-1,4	255x205x560	20,7

## 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	Running capacitor	Delivery port	Weight [kg]
	[kW]	[kW]	[HP]	[V]	[A]		length [m]	Type		[μf]		
50FDR-52-0,9M	1,2	0,9	1,2	230	5,6	1 ~	10	3G1	-	20	G2	18
50FDR-52-0,9M-G	1,2	0,9	1,2	230	5,6	1 ~	10	3G1	•	20	G2	18
50FDR-52-0,9T	1,2	0,9	1,2	400	2	3 ~	10	4G1	-	-	G2	18
50FDR-52-0,9T-G	1,2	0,9	1,2	400	2	3 ~	10	4G1	•	-	G2	18
50FDR-52-1,4M	1,8	1,4	1,9	230	8	1 ~	10	3G1	-	25	G2	20
50FDR-52-1,4M-G	1,8	1,4	1,9	230	8	1 ~	10	3G1	•	25	G2	20
50FDR-52-1,4T	1,8	1,4	1,9	400	3,8	3 ~	10	4G1	-	-	G2	20

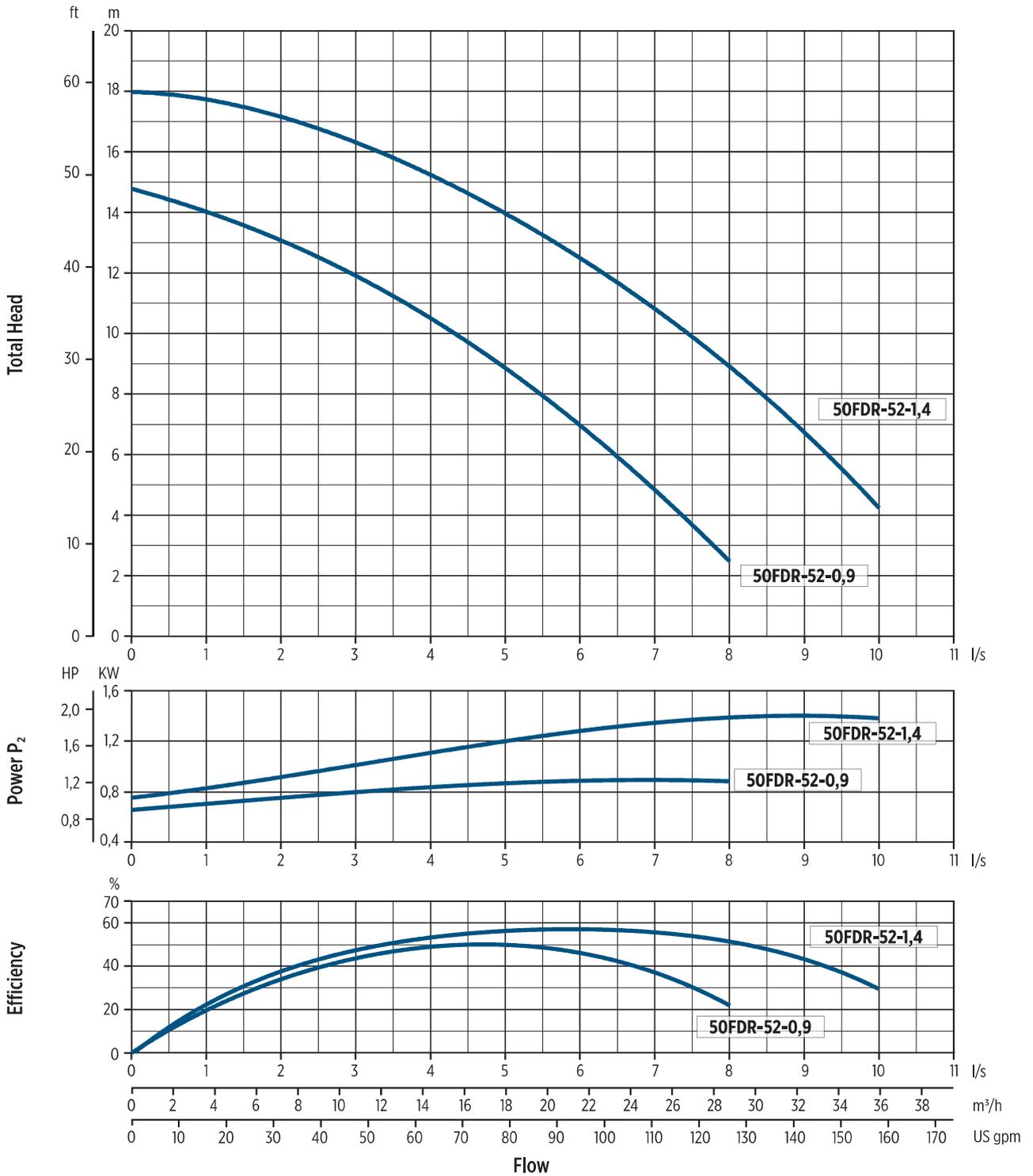
"-" = not available

• = available

## HYDRAULIC PERFORMANCE AT 50 HZ

Pump model	Phase	Q = Delivery														
		l/sec 0	1	1,5	2	2,5	3	3,5	4	4,5	5	6	7	8	9	10
		m <sup>3</sup> /h 0	3,6	5,4	7,2	9	10,8	12,6	14,4	16,2	18	21,6	25,2	28,8	32,4	36
		US gpm 0	15,8	23,7	31,7	39,6	47,5	55,5	63,4	71,3	79,2	92,1	110,9	126,8	142,6	158,5
		H = Total meters head of water column [m]														
50FDR-52-0,9	1 ~	14,8	14	13,5	13,2	12,5	12	11,1	10,6	9,7	8,7	7,2	4,7	2,5		
	3 ~	14,8	14	13,5	13,2	12,5	12	11,1	10,6	9,7	8,7	7,2	4,7	2,5		
50FDR-52-1,4	1 ~	18	17,7	17,5	17,2	16,6	16,4	15,9	15,5	14,2	14	12,8	10,5	9	6,8	4,2
	3 ~	18	17,7	17,5	17,2	16,6	16,4	15,9	15,5	14,2	14	12,8	10,5	9	6,8	4,2

PERFORMANCE CURVES AT 50 HZ



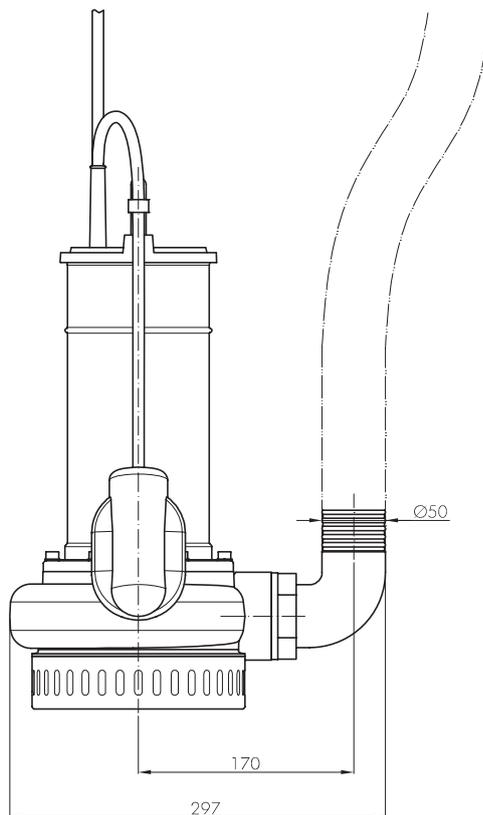
002010E 04/2023

## INSTALLATION

### INSTALLATION INSTRUCTIONS

#### TRANSPORTABLE INSTALLATION

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



00150298 04/2023