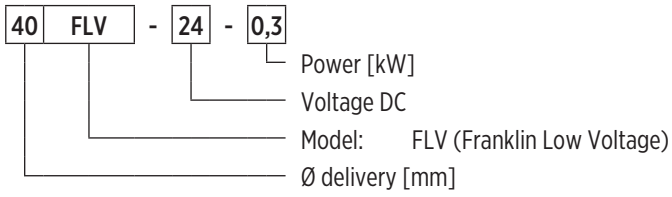


## FLV Series - D.C. motor submersible waste water lift pumps



# D.C. MOTOR SUBMERSIBLE WASTE WATER LIFT PUMPS

## PUMP IDENTIFICATION CODE



004008 01/2023



## 40FLV SERIES

### FEATURES & BENEFITS

### APPLICATIONS



Drainage



Domestic / industrial grey water

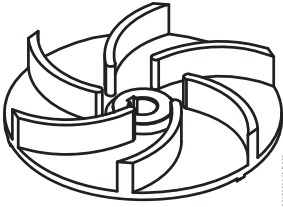


### MARKETS



### D.C. MOTOR SUBMERSIBLE WASTE WATER LIFT PUMPS

The D.C. electric submersible pumps are suitable for the drainage of water from road drain wells, basements and from sites where the electric current is not available. Easy to install and silent, this model offer the maximum safety.



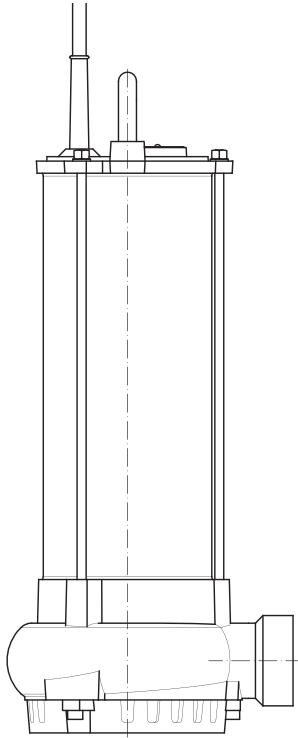
VORTEX IMPELLER

## GENERAL FEATURES

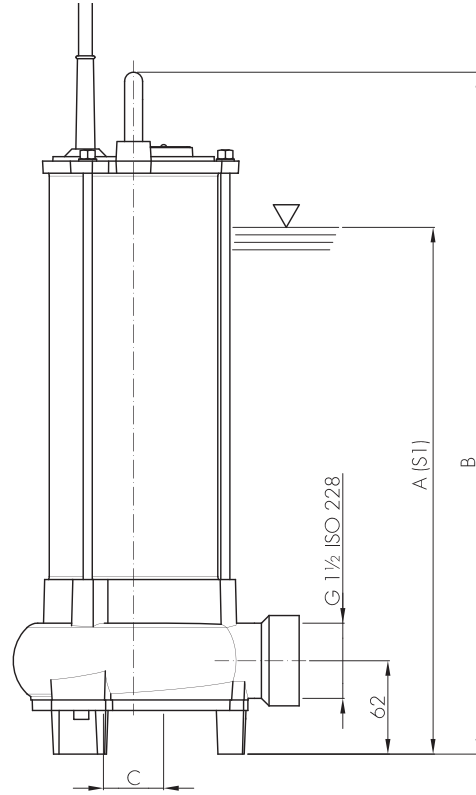
Materials/Constr.design		
Vortex impeller		Cast iron EN GJL200
External casing		Stainless steel AISI304
Pump body		Cast iron EN GJL200
Cover		Cast iron EN GJL200
Mechanical seal	motor side 40FLV-24-0,3, 40FLV-24-0,5, 40FLV-24-0,75	Seal ring
	pump side 40FLV-24-0,3, 40FLV-24-0,5, 40FLV-24-0,75	Graphite/Alumina
	pump side 40FLV-12-0,3	Silicon carbide (SiC/SiC)
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
Type		-
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%
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:		2 m
Free passage		20 mm
Min. immersion depth for continuous service	40FLV-24-0,3, 40FLV-12-0,3,40FLV-24-0,5	300 mm
	40FLV-24-0,75	350 mm
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)

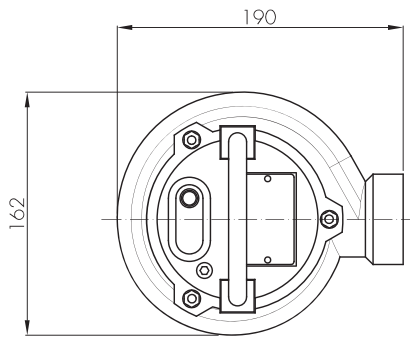
## DIMENSIONAL DRAWINGS



Version with filter on request



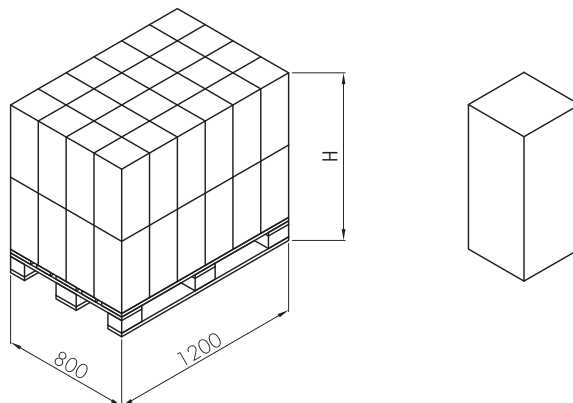
Dimensions [mm]			
Pump model	A	B	C
40FLV-24-0,3	300	402	30
40FLV-24-0,5	300	402	30
40FLV-24-0,75	350	453	40
40FLV-12-0,3	300	402	30



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Packaging		
Pump model	Dimensions [mm]	Weight [kg]
40FLV-24-0,3	220x180x450	11,5
40FLV-24-0,5	220x180x450	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	800x1200x800	32	440
40FLV-24-0,75	800x1200x900	24	460
40FLV-12-0,3	800x1200x800	32	400



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## TECHNICAL DATA

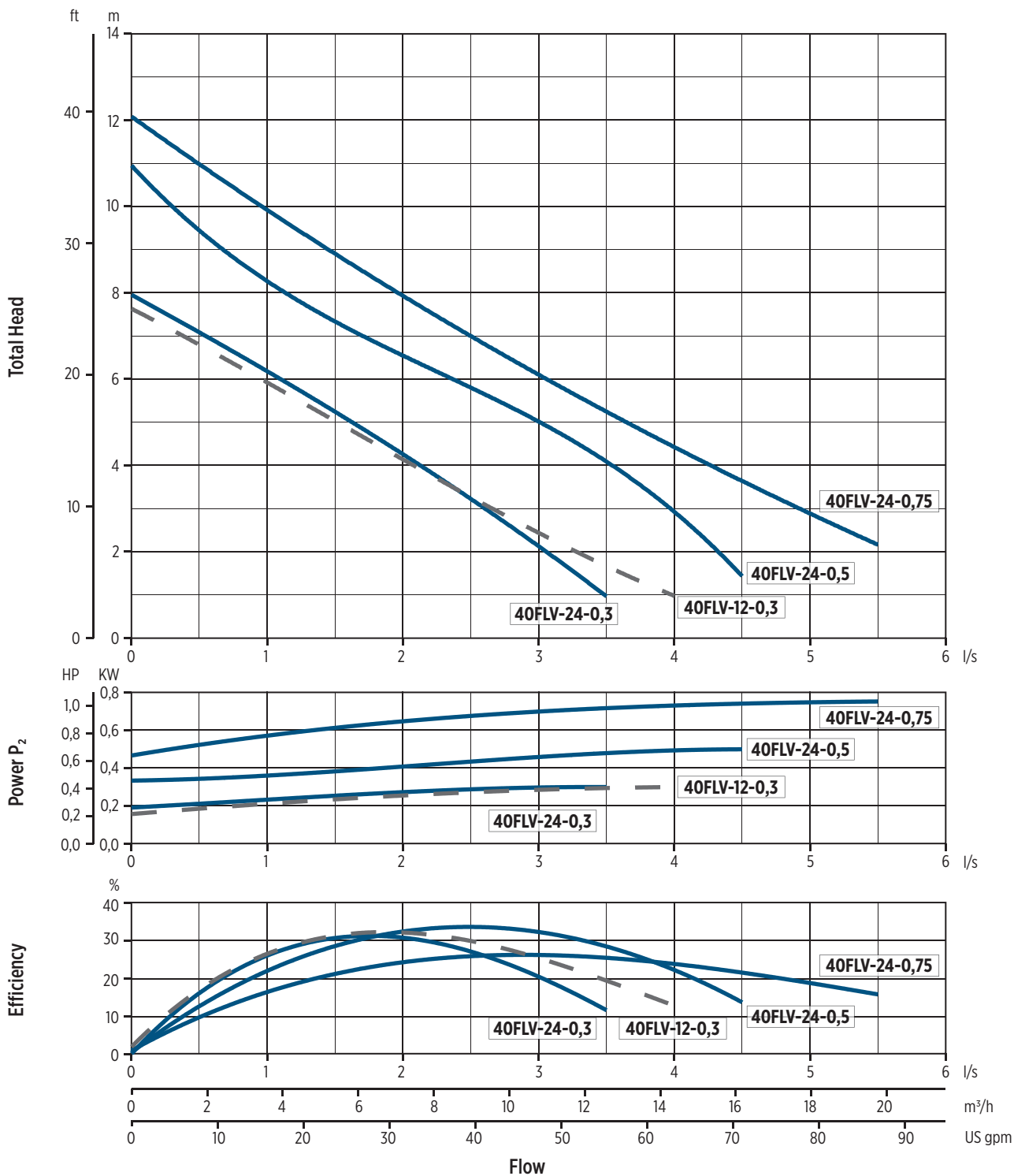
Pump model	Motor absorbed power P <sub>1</sub>	Rated power P <sub>2</sub>		Voltage	Rated current	Power cable		Delivery port	Weight [kg]
	[kW]	[kW]	[HP]	[V]	[A]	length [m]	Type		
40FLV-24-0,3	0,4	0,3	0,4	24DC	17	5	2X6	G1½	11
40FLV-24-0,5	0,62	0,5	0,7	24DC	26	5	2X6	G1½	12
40FLV-24-0,75	0,84	0,75	1	24DC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

“-” = not available  
 • = available

## HYDRAULIC PERFORMANCE

Pump model	Voltage	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	
	[V]	H = Total meters head of water column [m]											
40FLV-24-0,3	24DC	8	7	6,2	5,3	4,3	3,2	2,1	1				
40FLV-24-0,5	24DC	10,9	9,7	8	7,1	6,8	6	5	3,9	2,9	1,5		
40FLV-24-0,75	24DC	12	11	10	9	8	7	5,8	5,1	4,5	3,9	3	2
40FLV-12-0,3	12DC	7,5	7	6	5	4	3,1	2,5	2	0,8			

## PERFORMANCE CURVES



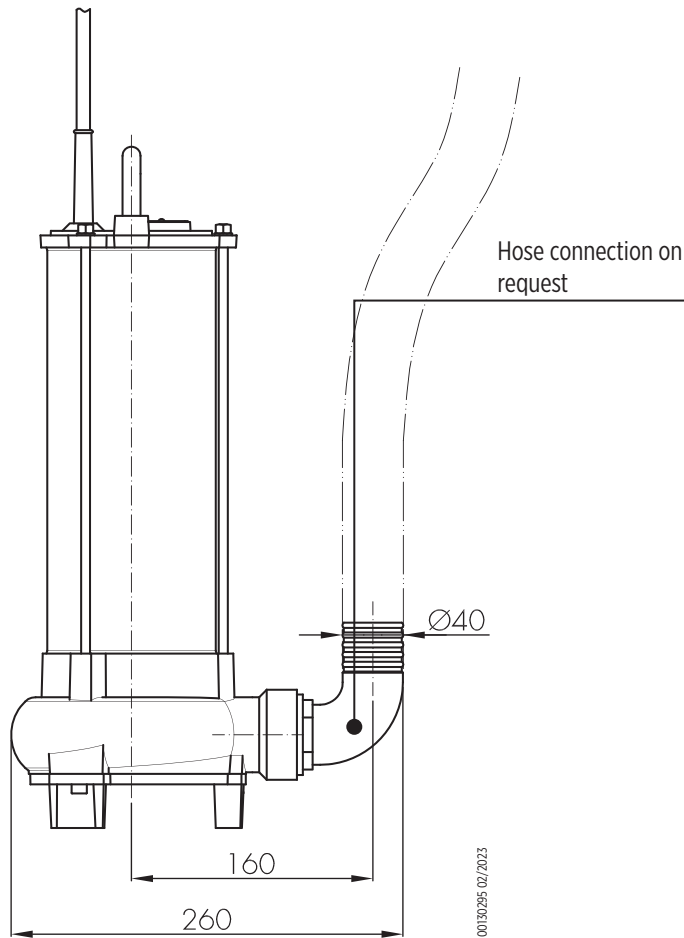
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## INSTALLATION

### INSTALLATION INSTRUCTIONS

#### TRANSPORTABLE INSTALLATION

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





## CATALOG REVISION CHANGE 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
03	40FGR General Features data table correction about power cable single-phase	82
03	50FGR General Features data table correction about power cable single-phase	88
03	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
03	50FWC V and 50FWC M Technical data correction from "0,75 HP" to "1,2 HP"	28, 34
03	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
03	50FGR Technical data correction - Running capacitor section	90
03	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
04	"EDV Hydraulic Performance 50 Hz $\approx$ 2900 l/min" section removed	10
04	"EGN - Submersible Drainage Pumps for Clean Water" section removed	
04	Updated tables	6, 8, 10, 14, 15, 16
04	Pump Identification Code section modified	6
04	EGN model removed	All
04	EDV model removed	All
04	"HH" (High Head version) deleted from FWS-FWC series pump identification code	18
04	50FWC V General Features update: voltage single-phase	38
04	50FWC M General Features update: voltage single-phase	44
04	50FWC V4 General Features update: voltage single-phase	50
04	65FWC V4 General Features update: voltage single-phase	68
04	50FGR Technical Data table update	102