

# FMW4/FMW4 SS

## Submersible well motors

The FMW4 / FMW4SS series submersible well motor is water-filled with a resin-encapsulated stator.

In the FMW4 version, the upper support is made of cast iron and covered with an SS 304 stainless steel plate, while in the FMW4SS version the upper support is a monoblock made entirely of stainless steel 304, as are all parts in contact with water.

It is an asynchronous 2-pole motor, with a 24-slot stator and squirrel-cage rotor. Special bearings minimize vibrations, extending the service life of the electric pump.

The resin insulation, designed as a replaceable cartridge, ensures improved motor cooling and particularly better operation with inverter drives. The power cable is equipped with a watertight plug, which is very useful for quick replacement directly at the installation site.

The rotor shaft extension is made of stainless steel 304 up to 3 HP, while for higher power ratings it is made of Duplex stainless steel.

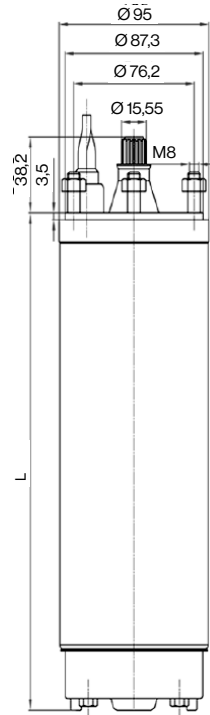
All motors are tested and inspected at the end of the production line.

### Construction features

<b>Upper support</b>	cast iron (FMW4) stainless steel AISI 304 (FMW4SS)
<b>External jacket and cup</b>	stainless steel AISI 304
<b>Pump shaft end</b>	304 up to 3HP - Duplex from 4HP
<b>Thrust bearing</b>	Mitchell tilting-pad thrust bearing
<b>Number of startups/hr</b>	30
<b>Cooling fluid</b>	water 30% glycol
<b>Winding wire</b>	encapsulated stator
<b>Voltage</b>	3- 400V $\pm$ 10%
<b>Insulation class</b>	F
<b>Protection degree</b>	IPX8
<b>Pumped liquid temperature</b>	35 °C
<b>Max. diameter</b>	95
<b>Minimum water flow</b>	0,10 m/s
<b>Depth of immersion</b>	350 m
<b>Available accessories</b>	cooling jacket / cable / control panels / PT100



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TYPE 1-	HP	kW	V	AXIAL LOAD N	I <sub>N</sub> A	µF	Efficiency			Cos φ			L mm	Kg	CABLE	
							50%	75%	100%	50%	75%	100%			Lenght m	Size mm <sup>2</sup>
FMW4(SS) 005M	0,5	0,37	1-230	2000	3,2	20	38	47	55	0,77	0,84	0,95	250	7,7	1,5	1,7
FMW4(SS) 007M	0,75	0,55			4,2	25	40	50	60	0,86	0,88	0,96	270	8,4		
FMW4(SS) 010M	1	0,75			5,8	35	42	56	63	0,85	0,91	0,93	290	9,4		
FMW4(SS) 015M	1,5	1,1		7,8	40	43	57	67	0,77	0,86	0,97	340	11,4			
FMW4(SS) 020M	2	1,5		3000	10,4	60	48	60	67	0,80	0,88	0,99	370	12,8		
FMW4(SS) 030M	3	2			14,8	70	48	59	68	0,82	0,90	0,98	430	14,7		
FMW4(SS) 050M	5	3,7	6500	21,8	100+250	48	60	76	0,87	0,92	0,99	660	27,8	2	2,7	
FMW4(SS)-2W 005M	0,5	0,37	1-230	2000	3,5	20	38	47	52	0,77	0,84	0,91	340	10,1	1,5	1,5
FMW4(SS)-2W 007M	0,75	0,55			4,8	25	40	50	57	0,86	0,88	0,90	360	10,7		
FMW4(SS)-2W 010M	1	0,75			5,7	35	42	56	63	0,85	0,91	0,96	380	11,5		
FMW4(SS)-2W 015M	1,5	1,1			8,2	40	43	57	64	0,77	0,86	0,92	430	12,9		

TYPE 3~	HP	kW	V	AXIAL LOAD	I <sub>N</sub>	Efficiency			Cos Φ			L	Kg	CABLE					
						N	A	50%	75%	100%	50%			75%	100%	mm	Lenght m	Size mm <sup>2</sup>	
				FMW4(SS) 005T	0,5	0,37	3-400	2000	1,3	55	65	70	0,50	0,61	0,70	230	7,1	1,5	1,7
FMW4(SS) 007T	0,75	0,55	1,6	60	68	75			0,51	0,60	0,74	250	7,7						
FMW4(SS) 010T	1	0,75	2,2	63	66	72			0,54	0,67	0,69	270	8,4						
FMW4(SS) 015T	1,5	1,1	3,1	65	71	76			0,51	0,64	0,69	290	9,4						
FMW4(SS) 020T	2	1,5	3,9	63	69	76			0,52	0,65	0,73	340	11,4						
FMW4(SS) 030T	3	2	5,4	62	67	76			0,53	0,67	0,78	370	12,8						
FMW4(SS) 040T	4	3	7,6	66	71	76		0,52	0,66	0,77	440	16,7							
FMW4(SS) 055T	5,5	4	6500	9,9	71	76		76	0,50	0,65	0,82	570	23,2	2	2,7				
FMW4(SS) 075T	7,5	5,5		12,7	69	73		77	0,59	0,72	0,85	660	27,8						
FMW4(SS) 100T	10	7,5		17,2	69	73		78	0,55	0,73	0,86	770	32,5						
FMW4(SS) 125T	12,5	9,3		21,4	75	79		79	0,56	0,71	0,81	860	38,0						
FMW4(SS) 005T2	0,5	0,37		3-230	2000	2,2		55	65	70	0,50	0,61	0,70			230	7,1	1,5	1,7
FMW4(SS) 007T2	0,75	0,55				2,8	60	68	75	0,51	0,60	0,71	250			7,7			
FMW4(SS) 010T2	1	0,75	3,8			63	66	72	0,54	0,67	0,76	270	8,4						
FMW4(SS) 015T2	1,5	1,1	5,3			65	71	76	0,51	0,64	0,73	290	9,4						
FMW4(SS) 020T2	2	1,5	6,7			63	69	76	0,52	0,65	0,75	340	11,4						
FMW4(SS) 030T2	3	2	9,2			62	67	76	0,53	0,67	0,78	370	12,8						
FMW4(SS) 040T2	4	3	13,0		66	71	76	0,52	0,66	0,76	440	16,7							
FMW4(SS) 055T2	5,5	4	6500		16,9	71	76	76	0,50	0,65	0,74	570	23,2	2	2,7				
FMW4(SS) 075T2	7,5	5,5			21,6	69	73	77	0,59	0,72	0,77	660	27,8						
FMW4(SS) 005T4	0,5	0,37			3-80	2000	7,0	55	65	70	0,50	0,61	0,70			220	5,8	1,5	1,7
FMW4(SS) 010T3	1	0,75			3-110		6,9	63	66	72	0,54	0,67	0,76			260	7,9		
FMW4(SS) 030T5	3	2,2			3-330		7,8	62	67	73	0,53	0,67	0,78			340	13,4		

N. CODE	DESCRIPTION	MATERIAL	
		FMW4	FMW4 SS
9050	REMOVABLE PLUG	SS 304 / EPDM	SS 304 / EPDM
9100.1	UPPER RADIAL BEARING	GRAPHITE	GRAPHITE
9100.2	LOWER RADIAL BEARING	GRAPHITE	GRAPHITE
9100.3	THRUST BEARING	GRAPHITE / SS 303	GRAPHITE / SS 303
9500	WOUND STATOR	P01 / Cu	P01 / Cu
9600	ROTOR	P01 / Al / C10 / SS 304	P01 / Al / C10 / SS 304
9710	UPPER SUPPORT	G20 / SS 304	STAINLESS STEEL 304
9750	LOWER SUPPORT	G20	STAINLESS STEEL 304
9760	CUP	STAINLESS STEEL 304	STAINLESS STEEL 304
9780	SPRING	STAINLESS STEEL 304	STAINLESS STEEL 304
9950.1	SAND GUARD	NBR / SS 304	NBR / SS 304
9950.2 - 9950.3	O-RING	NBR	NBR
9960	COMPENSATION DIAPHRAGM	NBR	NBR
9996	NON-TOXIC FILLING FLUID	WATER + GLYCOL	WATER + GLYCOL

