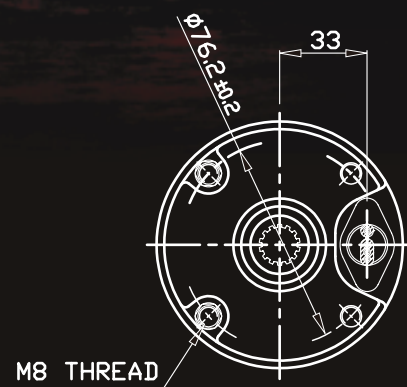


STAIRS



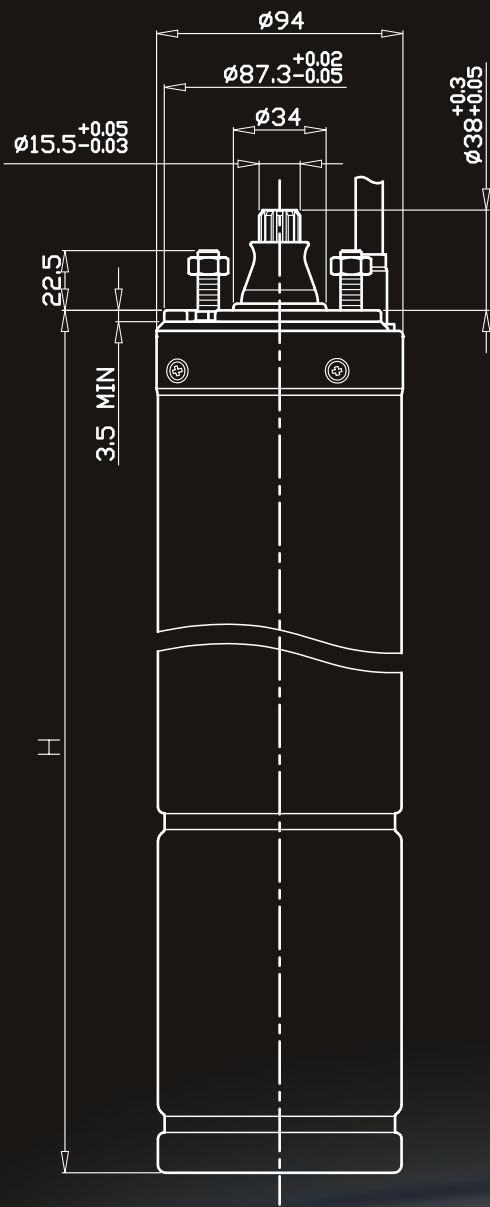
DIMENSIONS AND WEIGHTS SINGLE-PHASE MOTORS 50Hz & 60Hz

P2		H	Weight	Thrust Load
kW	HP	mm	Kg	N
0.37	0.5	346	7.3	2000
0.55	0.75	365	8.2	2000
0.75	1	380	8.8	2000
1.1	1.5	405	10.0	2000
1.5	2	440	11.5	2000
2.2	3	495	14.0	3000
3	4	607	19.4	5000
3.7	5	683	22.7	5000
4	5.5	683	22.8	5000



THREE-PHASE MOTORS 50Hz & 60Hz

P2		H	Weight	Thrust Load
kW	HP	mm	Kg	N
0.37	0.5	330	6.7	2000
0.55	0.75	346	7.4	2000
0.75	1	365	8.2	2000
1.1	1.5	380	8.9	2000
1.5	2	405	10.0	2000
2.2	3	440	11.6	3000
3	4	516	15.2	5000
4	5.5	607	19.5	5000
5.5	7.5	683	23.1	5000
7.5	10	783	27.5	5000



MATERIAL SPECIFICATIONS

Component	Material
Motor Shell	304 Stainless steel
Sand Guard	NBR
Cable Connector	EPDM
Upper end bracket cover	304 Stainless steel
Upper end bracket	Zinc plated cast iron
Mechanical seal	Ceremic/Carbon
Shaft (0.5 - 3 HP)	304 Stainless steel
Shaft (4 - 10HP)	630 Stainless steel
Rotor (0.5 - 3 HP)	Aluminum
Rotor (4 - 10HP)	Copper
Connector	PPS
Winding	Copper
Lower end bracket	Aluminum
Lower end bracket cover	304 Stainless steel
Diaphragm	NBR

Note:
Specifications subject to change without notice.

4" SUBMERSIBLE MOTOR - 3 WIRE



STAIRS INDUSTRIAL CO., LTD.
NO.3-8, Sanchial Tsun, Lutsao Hsiang, Chia Hsien, Taiwan, R.O.C.
E-mail: stairs@stairs.com.tw
Website: www.stairs.com.tw



APPLICATIONS

Stairs rewindable 4" oil filled submersible motors are designed to operate dependably in 4" and larger boreholes

GENERAL SPECIFICATIONS

Mounting flange	4" NEMA standard
Degree of protection	IP 68
Insulation class	F
Single phase motors	0.37 kW up to 4.0 kW
Three phase motors	0.37 kW up to 7.5 kW
Standard voltages	1~ 230V(50Hz) 1~ 110V or 230V(60Hz) 3~ 230V or 400V (50Hz) 3~ 230V or 400V (60Hz)
Cable length	1.7M 0.37 kW up to 1.5 kW 2.5M 2.2 kW up to 7.5 kW

OPERATING PARAMETERS

Max voltage variation	+ 10% / - 10%
Max starts / h	40
Max water temperature	35°C
Flow rate	0.2m/sec
Axial thrust	2000N from 0.37 kW up to 1.5 kW 3000N 2.2 kW 5000N from 3 kW up to 7.5 kW
Max immersion depth	200m

FEATURES

- Removable waterproof cable connector for easy maintenance operations.
- Cable materials are CE approved (for potable water applications).
- Non-toxic oil - Premium quality, colorless white oil meeting the requirements of international and national authorities for pharmaceutical white oils. (USA FDA, US Pharmacopeia/National Formulary, European Pharmacopoeia approved).
- Special stator design for high starting torque in single-phase models.
- Unique single-phase electrical design for PSC starting, and starting capacitor + PSC starting.
- Motor casing, shaft, upper cover and bottom end made of stainless steel.
- Zinc-plated cast iron upper bracket.
- Stators are designed for higher efficiency and the ability to operate within wider voltage fluctuations.
- Use of high quality European made components such as mechanical seal, cable connectors, copper winding wires and insulations.
- All motors 100% tested.

TECHNICAL DATA

SINGLE-PHASE MOTORS 50 Hz PSC

Motor Type	P2		Voltage	In	Istart	Efficiency	PF	Nn	Thrust Load	Capacitor	Cable	
	kW	HP	V	A	A	%	COSφ	RPM	N	μF	mm2	m
4R201	0.37	0.5	230	3.7	12	53	0.90	2840	2000	16	1.5	1.7
4R202	0.55	0.75	230	5.0	15	62	0.90	2840	2000	20	1.5	1.7
4R203	0.75	1	230	6.2	20	64	0.90	2840	2000	25	1.5	1.7
4R204	1.1	1.5	230	8.1	32	68	0.90	2840	2000	35	1.5	1.7
4R206	1.5	2	230	10.4	38	73	0.90	2840	2000	40	1.5	1.7
4R307	2.2	3	230	15.0	46	72	0.90	2840	3000	55	1.5	2.5
4R508	3	4	230	22.7	70.8	67	0.90	2840	5000	70	1.5	2.5
4R505	3.7	5	230	25.4	80.4	70	0.92	2840	5000	75	2	2.5
4R509	4	5.5	230	28.1	85	70	0.90	2840	5000	85	2	2.5

THREE-PHASE MOTORS 50 HZ DOL

Motor Type	P2		Voltage	In	Istart	Efficiency	PF	Nn	Thrust Load	Capacitor	Cable	
	kW	HP	V	A	A	%	COSφ	RPM	N	μF	mm2	m
4R222	0.37	0.5	230	2.9	7.8	60	0.80	2870	2000		1.5	1.7
4R223	0.55	0.75	230	3.4	11.6	64	0.80	2850	2000		1.5	1.7
4R224	0.75	1	230	4.0	15	66	0.80	2840	2000		1.5	1.7
4R225	1.1	1.5	230	5.3	21	70	0.80	2850	2000		1.5	1.7
4R226	1.5	2	230	6.9	24	72	0.80	2850	2000		1.5	1.7
4R328	2.2	3	230	9.7	38	71	0.85	2850	3000		1.5	2.5
4R529	3	4	230	12.8	74	73	0.85	2850	5000		1.5	2.5
4R530	4	5.5	230	17.1	84	75	0.85	2850	5000		1.5	2.5
4R531	5.5	7.5	230	23.8	112	75	0.85	2850	5000		2.0	2.5
4R210	0.37	0.5	400	1.6	4.5	60	0.80	2870	2000		1.5	1.7
4R211	0.55	0.75	400	1.9	6.7	64	0.80	2840	2000		1.5	1.7
4R212	0.75	1	400	2.3	8.9	66	0.80	2840	2000		1.5	1.7
4R213	1.1	1.5	400	3.1	12	70	0.80	2850	2000		1.5	1.7
4R214	1.5	2	400	4.0	14	72	0.80	2850	2000		1.5	1.7
4R316	2.2	3	400	5.6	22	71	0.85	2850	3000		1.5	2.5
4R517	3	4	400	7.4	43	73	0.85	2840	5000		1.5	2.5
4R518	4	5.5	400	9.8	49	75	0.85	2850	5000		1.5	2.5
4R519	5.5	7.5	400	13.7	65	75	0.85	2850	5000		2.0	2.5
4R521	7.5	10	400	18.7	87	76	0.85	2850	5000		2.0	2.5

SINGLE-PHASE MOTORS 60 Hz PSC

Motor Type	P2		Voltage	S.F	In	Imax	Istart	Efficiency	Nn	Thrust Load	Capacitor	Cable	
	kW	HP	V	--	A	A	A	%	RPM	N	μF	mm2	m
4R261	0.37	0.5	110	1.6	8.5	9.8	30	64	3430	2000	65	1.5	1.7
4R251	0.37	0.5	230	1.6	4.8	5.2	15	64	3430	2000	16	1.5	1.7
4R291	0.37	0.5	254	1.6	4.3	4.7	13.8	58	3430	2000	12.5	1.5	1.7
4R262	0.55	0.75	110	1.5	10.9	12.8	38	65	3440	2000	80	1.5	1.7
4R252	0.55	0.75	230	1.5	5.6	6.6	19	65	3440	2000	20	1.5	1.7
4R292	0.55	0.75	254	1.5	5.3	6	17.1	62	3430	2000	16	1.5	1.7
4R263	0.75	1	110	1.4	11.5	14.5	50	68	3440	2000	100	1.5	1.7
4R253	0.75	1	230	1.4	6.3	7.6	25	68	3440	2000	25	1.5	1.7
4R293	0.75	1	254	1.4	5.5	6.7	19.3	66	3430	2000	20	1.5	1.7
4R264	1.1	1.5	110	1.3	17.4	20.2	50.69	68	3440	2000	140	1.5	1.7
4R254	1.1	1.5	230	1.3	8.7	10.3	34	69	3450	2000	35	1.5	1.7
4R294	1.1	1.5	254	1.3	7.9	9.2	25.7	65	3450	2000	30	1.5	1.7
4R256	1.5	2	230	1.25	10.6	12.2	41	72	3450	2000	40	1.5	1.7
4R296	1.5	2	254	1.25	11	12	38	68	3450	2000	35	1.5	1.7
4R357	2.2	3	230	1.15	14.4	16.1	45	70	3450	3000	55	1.5	2.5
4R397	2.2	3	254	1.15	14	15.4	48.9	71	3450	3000	45	1.5	2.5
4R558	3.7	5	230	1.15	25	28	64	71	3450	5000	75	2	2.5

THREE-PHASE MOTORS 60 HZ DOL

Motor Type	P2		Voltage	S.F	In	Imax	Istart	Efficiency	Nn	Thrust Load	Capacitor	Cable	
	kW	HP	V	--	A	A	A	%	RPM	N	μF	mm2	m
4R280	0.37	0.5	230	1.6	2.8	3.3	10	68	3450	2000		1.5	1.7
4R281	0.55	0.75	230	1.5	3.8	4.3	17	69	3450	2000		1.5	1.7
4R282	0.75	1	230	1.4	4.5	5.2	24	72	3450	2000		1.5	1.7
4R283	1.1	1.5	230	1.3	5.7	6.6	33	72	3450	2000		1.5	1.7
4R284	1.5	2	230	1.25	7.6	8.5	40	74	3450	2000		1.5	1.7
4R386	2.2	3	230	1.15	10.3	11.2	48	74	3450	3000		1.5	2.5
4R587	3.7	5	230	1.15	17.5	18.7	109	75	3450	5000		1.5	2.5
4R588	5.5	7.5	230	1.15	25.3	27.6	134	75	3450	5000		2.0	2.5
4R270	0.37	0.5	400	1.6	1.6	1.9	9	68	3450	2000		1.5	1.7
4R271	0.55	0.75	400	1.5	2.2	2.5	11	69	3450	2000		1.5	1.7
4R272	0.75	1	400	1.4	2.6	3	14	72	3450	2000		1.5	1.7
4R273	1.1	1.5	400	1.3	3.3	3.8	19	72	3450	2000		1.5	1.7
4R274	1.5	2	400	1.25	4.4	4.9	23	74	3450	2000		1.5	1.7
4R376	2.2	3	400	1.15	6	6.5	28	74	3450	3000		1.5	2.5
4R577	3.7	5	400	1.15	10	11	63	75	3450	5000		1.5	2.5
4R578	5.5	7.5	400	1.15	14.5	15.9	78	75	3450	5000		2.0	2.5
4R579	7.5	10	400	1.15	20	21.8	92	76	3450	5000		2.0	2.5