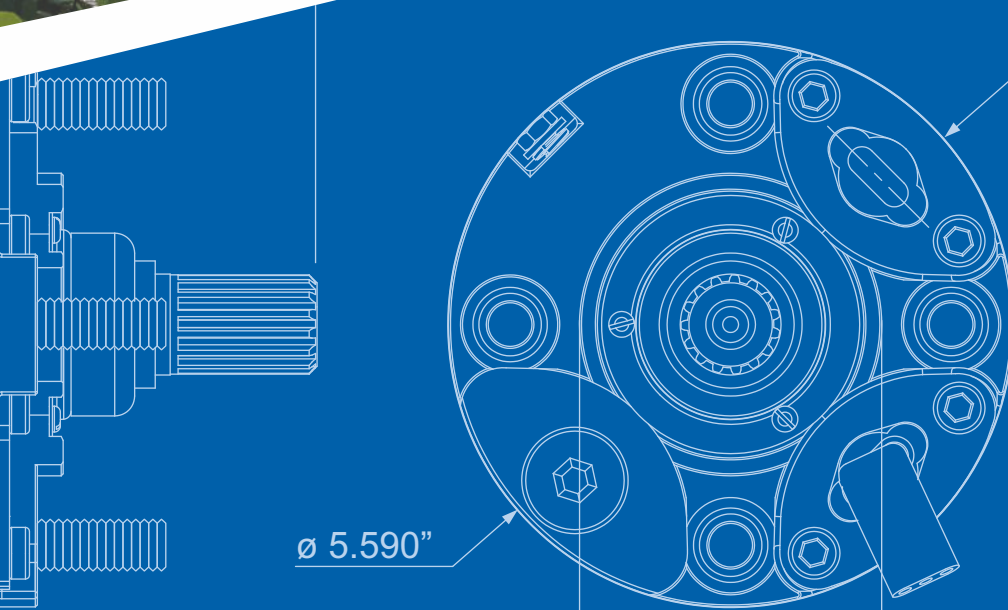
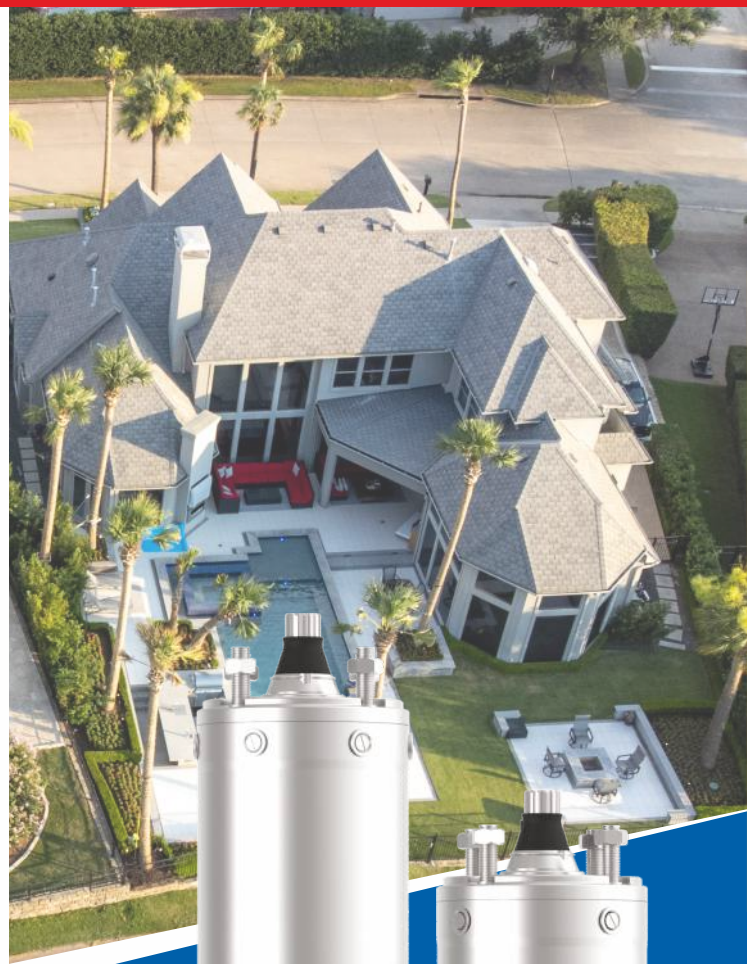
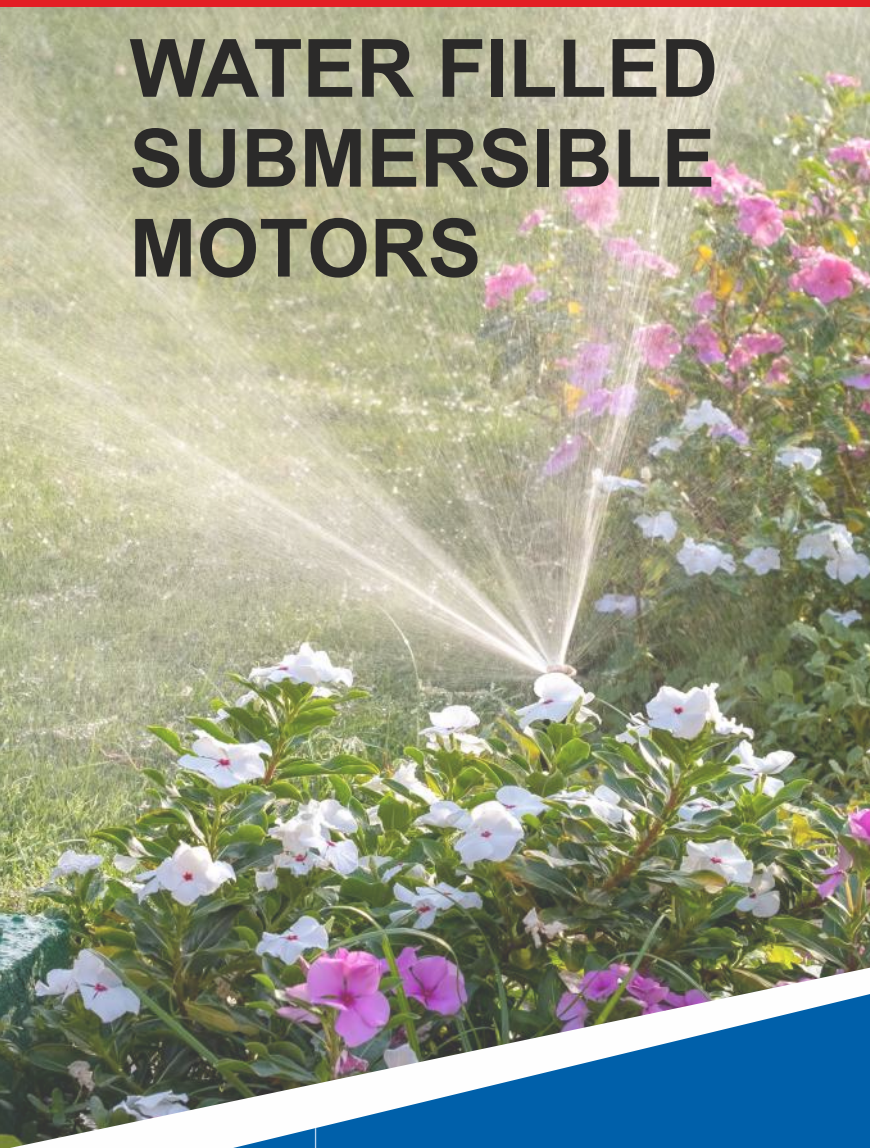


NM SERIES



WATER FILLED SUBMERSIBLE MOTORS



PRODUCT CATALOGUE

60Hz

www.northam-inc.com

SUBMERSIBLE MOTORS

CONTENTS

Model Code	3
4" F4 Water Filled Motors	
General Data	4
Material of Construction	5
Order Information	6
Dimensions	7
Performance Data	9
Control Box Model Code	11
Control Box Standard	12
Control Box Dimensions	13

SUBMERSIBLE MOTORS

0.5 HP to 7.5 HP

MODEL CODE

MOTOR SIZE: 4"

NM	A	4	-	0005	6	2W	-	A	2	2
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Thrust Load

Code	Thrust Load
1	1500N
2	2000N
3	3000N
4	4000N
6	6000N

Pole

Code	Pole
2	2

Volts

Code	Volts
A	115V
B	230V
D	460V

Power Supply

Code	Power Supply
2W	2-wire single phase
3W	3-wire single phase
3P	3 Phase

Frequency

Code	Hz
6	60

Motor HP

Code	HP
0005	0.5 HP
0007	0.75 HP
0010	1 HP
0075	7.5 HP

Motor size

Code	Size
4	4"

Material of construction

Code	Material
A	304 Stainless steel
B	316 Stainless steel
C	304 Stainless steel over iron

Series name

Code	Series
NM	F4 Water Filled Motors

SAMPLE CODE - **NMA4-000562W-A22**

SUBMERSIBLE MOTORS

0.5 HP to 7.5 HP

GENERAL DATA

MOTOR SIZE: 4"

SUITABLE WELL SIZE

- These motors are designed and sized for installation in 4" diameter or larger water wells.

FEATURES

- Heavy duty, rewindable, water filled submersible motor.
- Stainless steel splined shaft
- Equipped with Carbon/SiC mechanical shaft seal.
- Water lubricated heavy duty radial and axial thrust bearings.
- Counter thrust bearing.
- Motors are factory-filled with clean water + Glycol mixture.
- High efficiency electrical design (lower operating cost).
- Tropicalized design (lower winding temperature).
- 4" NEMA coupling flange.
- Pressure compensation diaphragm.



SPECIFICATIONS

	Motor construction
	Standard + High Thrust
Frequency	60 Hz
Motor ratings	3 phase - 0.5 to 7.5 HP 1 phase - 0.5 to 5.0 HP
Voltage (Tolerance +10% / -15%)	3 phase - 460 V 1 phase - 115 V, 230 V
Pole/RPM	2 Pole / 3450 RPM
Degree of protection	IP 68
Duty rating	Continuous
Ambient temperature	113 °F / 45 °C
Rotation	3 phase - CCW 1 phase - CCW
Maximum nos. of starts/hour	0.5 to 3.0 HP - 20 5 to 7.5 HP - 10
Minimum cooling flow along the motor	0.5 to 7.5 HP = 8 - 0.25 ft/sec
Maximum submerged depth	820 feet / 350 metres
Mounting	Vertical

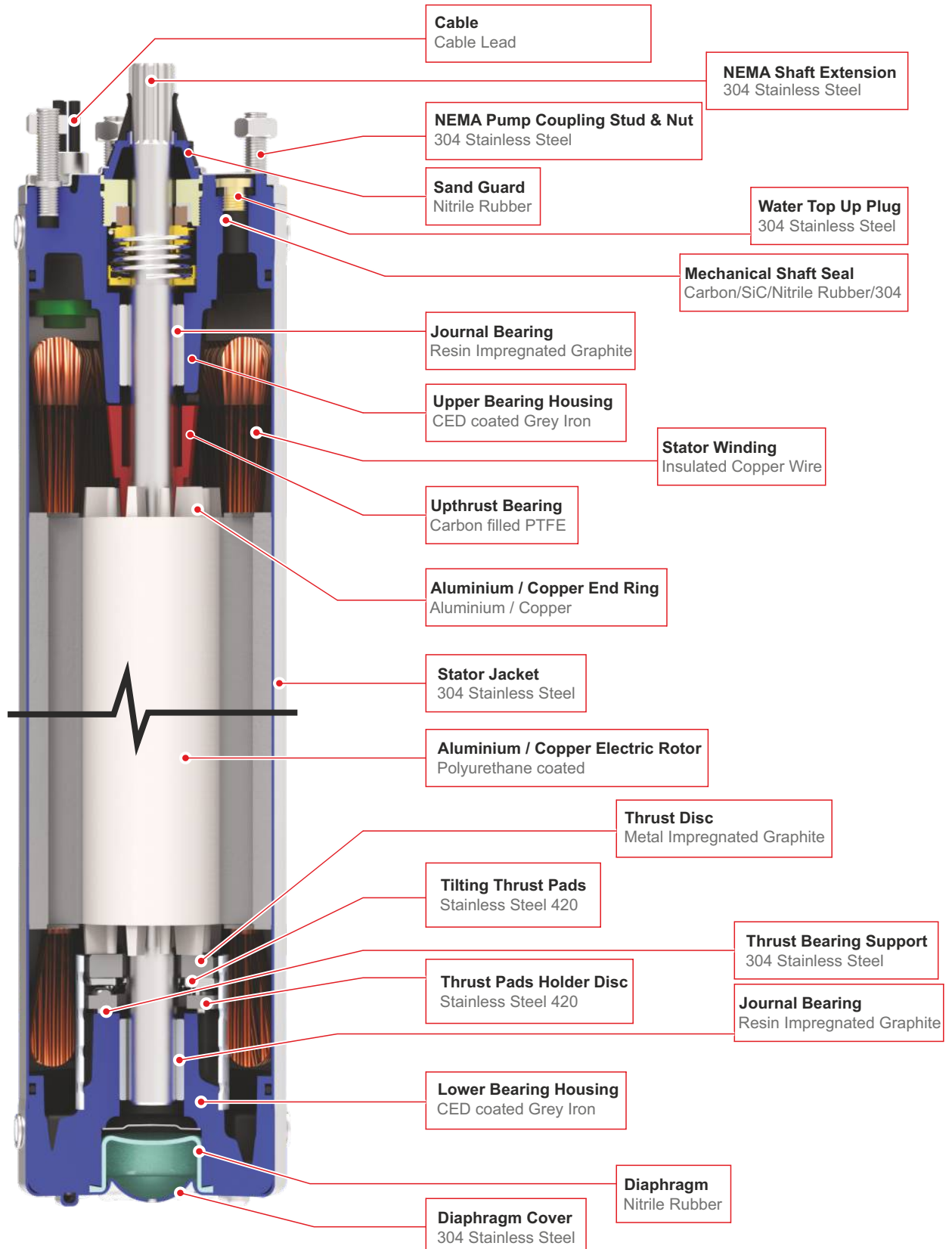
NOTE: SPECIFICATIONS ARE SUBJECT TO PERIODIC CHANGES DUE TO CONTINUOUS IMPROVEMENTS.

4" STANDARD SUBMERSIBLE MOTOR

0.5 HP to 7.5 HP

Material of Construction

MOTOR SIZE: 4"

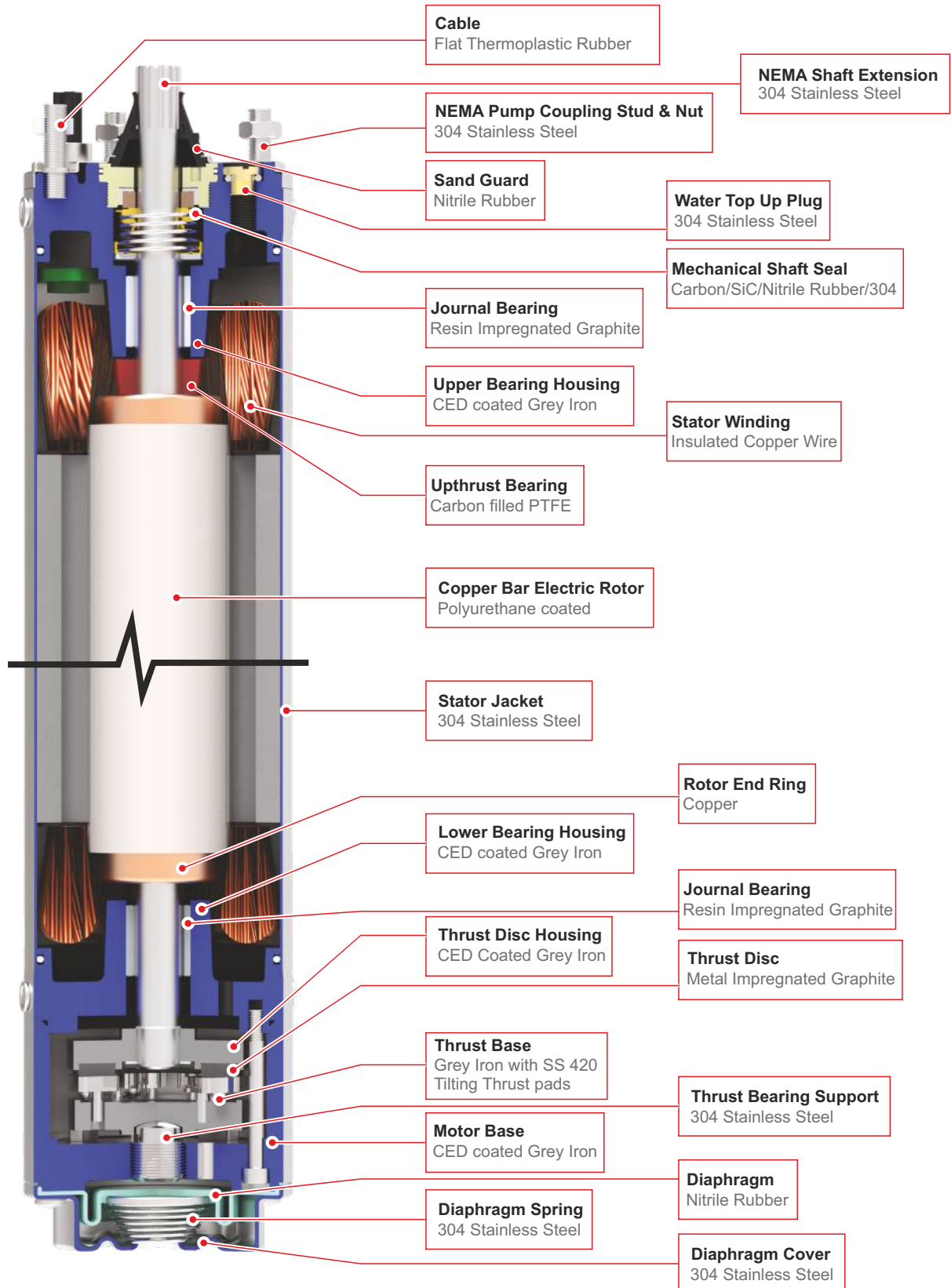


4" HIGH THRUST SUBMERSIBLE MOTOR

0.5 HP to 7.5 HP

Material of Construction

MOTOR SIZE: 4"



4" SUBMERSIBLE MOTOR

0.5 HP to 7.5 HP

ORDER INFORMATION

MOTOR SIZE: 4"

SINGLE PHASE

NMA4-000562W-A22

HP	kW	Hz	WIRE	VOLTS	CABLE (ft)	Thrust Load [N]	Motor Type	ORDER NO. / MODEL CODE
0.5	0.37	60	2	115	3.9	1500N	Permanent Split Capacitor	NMC4-000562W-A21
0.5	0.37	60	2	230	3.9	1500N		NMC4-000562W-B21
0.75	0.55	60	2	230	3.9	1500N		NMC4-000762W-B21
1.0	0.75	60	2	230	3.9	3000N		NMC4-001062W-B23
1.5	1.1	60	2	230	3.9	3000N		NMC4-001562W-B23
0.5	0.37	60	3	115	3.9	1500N	Capacitor Start & Run	NMC4-000563W-A21
0.5	0.37	60	3	230	3.9	1500N		NMC4-000563W-B21
0.75	0.55	60	3	230	3.9	1500N		NMC4-000763W-B21
1.0	0.75	60	3	230	3.9	3000N		NMC4-001063W-B23
1.5	1.1	60	3	230	3.9	3000N		NMC4-001563W-B23
2.0	1.5	60	3	230	3.9	4000N		NMC4-002063W-B24
3.0	2.2	60	3	230	8.2	4000N		NMC4-003063W-B24
5.0	3.7	60	3	230	8.2	4000N		NMC4-005063W-B24

THREE PHASE

HP	kW	Hz	VOLTS	CABLE (ft)	Thrust Load [N]	ORDER NO. / MODEL CODE
0.5	0.37	60	230	3.9	1500N	NMC4-000563P-B21
0.75	0.55	60	230	3.9	1500N	NMC4-000763P-B21
1.0	0.75	60	230	3.9	3000N	NMC4-001063P-B23
1.5	1.1	60	230	3.9	3000N	NMC4-001563P-B23
2.0	1.5	60	230	3.9	4000N	NMC4-002063P-B24
3.0	2.2	60	230	8.2	4000N	NMC4-003063P-B24
5.0	3.7	60	230	8.2	6000N	NMC4-005063P-B26
7.5	5.5	60	230	8.2	6000N	NMC4-007563P-B26
0.5	0.37	60	460	3.9	1500N	NMC4-000563P-D21
0.75	0.55	60	460	3.9	1500N	NMC4-000763P-D21
1.0	0.75	60	460	3.9	3000N	NMC4-001063P-D23
1.5	1.1	60	460	3.9	3000N	NMC4-001563P-D23
2.0	1.5	60	460	3.9	4000N	NMC4-002063P-D24
3.0	2.2	60	460	8.2	4000N	NMC4-003063P-D24
5.0	3.7	60	460	8.2	6000N	NMC4-005063P-D26
7.5	5.5	60	460	8.2	6000N	NMC4-007563P-D26

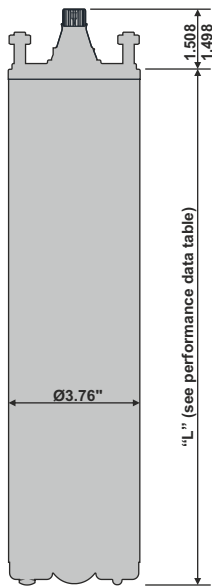
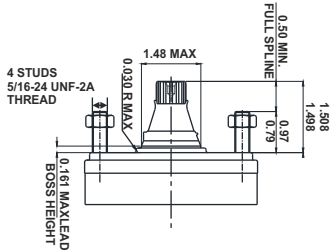
SUBMERSIBLE MOTORS

0.5 HP to 7.5 HP

DIMENSIONS

MOTOR SIZE: 4"

2-wire



HP	VOLTS	Dimension H (in)	Cable (ft)	Cable (AWG)	Shipping Weight (lbs)
0.5	115	19	6	14	23
0.5	230	19	6	14	23
0.75	230	20	6	14	28
1.0	230	21	6	14	31
1.5	230	23	6	14	35

3-wire

HP	VOLTS	Dimension H (in)	Cable (ft)	Cable (AWG)	Shipping Weight (lbs)
0.5	115	12.3	6	14	18.5
0.5	230	12.3	6	14	18.5
0.75	230	13.3	6	14	24.6
1.0	230	14.3	6	14	27.1
1.5	230	16.2	6	14	31.7
2.0	230	18.2	6	14	35.9
3.0	230	22.3	6	14	48.6
5.0	230	30.2	6	14	69.1

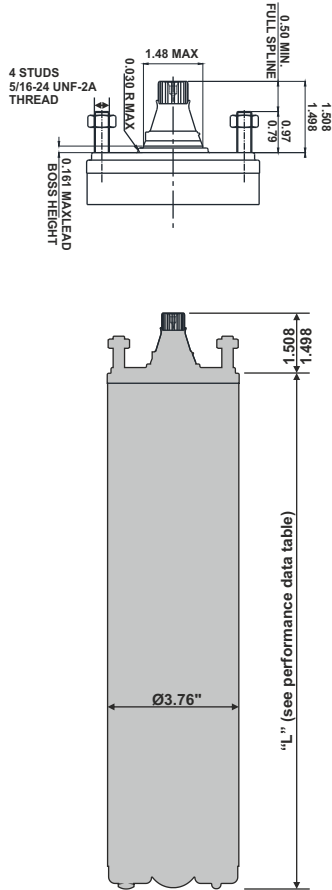
SUBMERSIBLE MOTORS

0.5 HP to 7.5 HP

DIMENSIONS

MOTOR SIZE: 4"

Three Phase



HP	VOLTS	Dimension H (in)	Cable (ft)	Cable (AWG)	Shipping Weight (lbs)
0.5	230	-	6	14	-
1.0	230	-	6	14	-
1.5	230	19.9	6	14	39.4
2.0	230	21.1	6	14	45.5
3.0	230	22.2	6	14	54.3
5.0	230	28.1	6	14	72.4
7.5	230	32.2	6	14	73.5

HP	VOLTS	Dimension H (in)	Cable (ft)	Cable (AWG)	Shipping Weight (lbs)
0.5	460	-	6	14	-
1.0	460	-	6	14	-
1.5	460	19.9	6	14	39.4
2.0	460	21.1	6	14	45.5
3.0	460	22.2	15	14	54.3
5.0	460	28.1	15	14	72.4
7.5	460	32.2	15	14	73.5

SUBMERSIBLE MOTORS

Single Phase

PERFORMANCE DATA-60 Hz

MOTOR SIZE: 4"

2-wire

P_N [HP]	S.F	U_N [V]	Thrust Load [N]	n_N [min ⁻¹]	Full Load			Service Factor Load			Locked Rotor Amp	KVA code
					Amp	Eff. %	Power Factor	Amp	Eff. %	Power Factor		
0.5	1.60	115	1500	3450	7.40	45.0	0.95	10.5	50.04	0.97	24.87	G
0.5	1.60	230	1500	3450	4.20	45.0	0.84	5.20	52.47	0.95	14.65	H
0.75	1.50	230	1500	3450	5.45	53.5	0.81	6.60	57.95	0.93	23.94	J
1	1.40	230	3000	3450	6.90	50.0	0.95	8.20	57.74	0.97	26.58	G
1.5	1.30	230	3000	3450	10.25	48.9	0.95	11.62	55.42	0.96	41.03	H

3-wire

P_N [HP]	S.F	U_N [V]	Thrust Load [N]	n_N [min ⁻¹]	Full Load			Service Factor Load			Locked Rotor Amp	KVA code
					Amp	Eff. %	Power Factor	Amp	Eff. %	Power Factor		
0.5	1.60	230	1500	3450	4.0	44.0	0.99	5.5	52.0	0.97	20.3	L
0.75	1.50	230	1500	3450	5.0	53.0	0.97	7.0	56.5	0.98	23.9	J
1	1.40	230	3000	3450	7.0	54.5	0.92	8.5	59.0	0.96	31.0	J
1.5	1.30	230	3000	3450	10.5	60.0	0.80	12.0	62.0	0.86	49.4	J
2	1.25	230	4000	3450	12.5	62.0	0.90	14.5	64.5	0.92	56.9	H
3	1.15	230	4000	3450	14.5	68.5	0.97	17.0	67.5	0.97	55.5	D
5	1.15	230	4000	3450	23.5	70.0	0.99	28.0	68.0	0.98	92.0	D

SUBMERSIBLE MOTORS

Three Phase

PERFORMANCE DATA-60 Hz

MOTOR SIZE: 4"

P _N [HP]	S.F	U _N [V]	Thrust Load [N]	n _N [min ⁻¹]	Full Load			Service Factor		Load	Locked Rotor Amp	KVA code
					Amp	Eff. %	Power Factor	Amp	Eff. %	Power Factor		
0.5	1.6	230	1500	3450	2.46	55.6	0.68	3.00	61.3	0.80	6.17	L
0.75	1.5	230	1500	3450	3.20	57.5	0.71	4.00	62.5	0.81	7.50	J
1	1.4	230	3000	3450	3.94	62.3	0.76	5.15	64.4	0.85	9.51	J
1.5	1.30	230	3000	3450	6.16	69.0	0.71	7.00	71.0	0.78	38.0	G
2	1.25	230	3000	3450	7.70	70.0	0.77	8.80	71.0	0.82	40.0	E
3	1.15	230	4000	3450	11.22	72.5	0.74	12.1	73.5	0.78	54.0	D
5	1.15	230	6000	3450	16.5	76.0	0.80	18.9	76.0	0.82	88.0	D
7.5	1.15	230	6000	3450	24.64	78.5	0.79	27.7	79.0	0.82	120.0	C

P _N [HP]	S.F	U _N [V]	Thrust Load [N]	n _N [min ⁻¹]	Full Load			Service Factor		Load	Locked Rotor Amp	KVA code
					Amp	Eff. %	Power Factor	Amp	Eff. %	Power Factor		
0.5	1.6	460	1500	3450	1.3	55.5	0.68	1.6	61.3	0.80	6.17	L
0.75	1.5	460	1500	3450	1.7	57.5	0.71	2.2	62.5	0.81	7.5	J
1	1.4	460	3000	3450	2.0	62.2	0.76	2.7	64.4	0.85	9.51	J
1.5	1.3	460	3000	3450	3.5	63.0	0.67	4.0	66.1	0.78	18.28	G
2	1.25	460	3000	3450	4.1	66.0	0.72	5.0	67.7	0.79	20.85	E
3	1.15	460	4000	3450	5.5	69.0	0.76	6.0	70.0	0.80	27.58	J
5	1.15	460	6000	3450	8.5	74.5	0.79	9.5	75.1	0.82	41.9	H
7.5	1.15	460	6000	3450	12.0	75.5	0.79	14.0	75.5	0.82	59.52	H

CONTROL BOX

0.5 HP to 5 HP

MODEL CODE

MOTOR SIZE: 4"

NB

W

4

S

0005

A

Volts

Code	Volts
A	110-115V
B	220-230V

Motor HP

Code	HP
0005	0.5 HP
0007	0.75 HP
0010	1 HP
0050	5 HP

Capacitor Type

Code	Capacitor Type
S	Start capacitor
D	Start & Run capacitor

Motor size

Code	Size
4	4"

Submersible Motor Type

Code	Submersible Motor Type
W	Water Filled Submersible Motors

Series name

Code	Series
NB	Control box

CONTROL BOX

Single Phase

ORDER INFORMATION

MOTOR SIZE: 4"

Model	Capacitor Type	HP	Voltage [V]	Start Capacitor MFD	Run Capacitor UF
NB-W-4-D-0005-A	START & RUN	0.5	115	86 - 100 MFD 400V	30UF 440V
NB-W-4-D-0005-B	START & RUN	0.5	230	60 - 80 MFD 400V	15UF 440V
NB-W-4-D-0007-B	START & RUN	0.75	230	120 - 150 MFD 400V	20UF 440V
NB-W-4-D-0010-B	START & RUN	1.0	230	100 - 120 MFD 400V	25UF 440V
NB-W-4-D-0015-B	START & RUN	1.5	230	150 - 200 MFD 400V	20UF 440V
NB-W-4-D-0020-B	START & RUN	2.0	230	200 - 250 MFD 400V	30UF 440V
NB-W-4-D-0030-B	START & RUN	3.0	230	200 - 250 MFD 400V	60UF 440V
NB-W-4-D-0050-B	START & RUN	5.0	230	250 - 300 MFD 400V	72UF 440V

CONTROL BOX

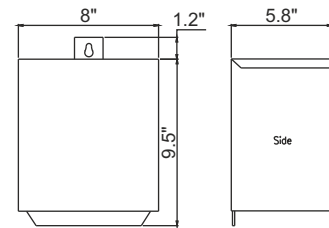
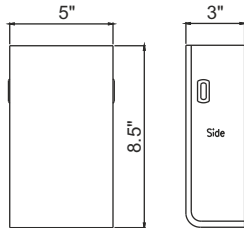
Single Phase

DIMENSIONS

MOTOR SIZE: 4"

Start & Run Capacitor Control box

Start & Run Capacitor Control box



HP	kW	Voltage [V]	Capacitor Type	Carton Box Size			Bottom Knockouts Quantity	Side Knockouts Diameter	Volume
				L	W	H			
0.5	0.37	115	START & RUN	9.9"	5.5"	3.6"	2	Ø0.86"	39.3" x 32.2" x 54.3"
0.5	0.37	230	START & RUN	9.9"	5.5"	3.6"	2	Ø0.86"	39.3" x 32.2" x 54.3"
0.75	0.55	230	START & RUN	9.9"	5.5"	3.6"	2	Ø0.86"	39.3" x 32.2" x 54.3"
1.0	0.75	230	START & RUN	9.9"	5.5"	3.6"	2	Ø0.86"	39.3" x 32.2" x 54.3"
1.5	1.1	230	START & RUN	11.5"	8.5"	6.5"	2	Ø1.3"	40.9" x 34.6" x 55.1"
2.0	1.5	230	START & RUN	11.5"	8.5"	6.5"	2	Ø1.3"	40.9" x 34.6" x 55.1"
3.0	2.2	230	START & RUN	11.5"	8.5"	6.5"	2	Ø1.3"	40.9" x 34.6" x 55.1"
5.0	3.7	230	START & RUN	11.5"	8.5"	6.5"	2	Ø1.3"	40.9" x 34.6" x 55.1"

NOTES

[illegible]



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