SF Series 4" Brushless AC Servo Motors

(Food Grade*)

(6 Pole)

UL Recognized

ELWOOD HIGH PERFORMANCE MOTORS SERVOS - STEPPERS

Winding

	Torque, Cont. Nm (Note 2)	(lb-in)	Winding Speed (RPM) (Note 2)	Current, Cont. (Arms)
41-E	2.1	(19.0)	3000	2.0
42-E	4.1	(37.0)	3000	3.9
	M442E = M312A			
42-G	4.1	(37.0)	4000	5.0
42-K	4.1	(37.0)	5500	7.0
	M442K = M312C			
43-E	5.5	(49.0)	3000	5.5
	M443E = M313A			
43-G	5.5	(49.0)	4000	7.2
43-K	5.5	(49.0)	5500	10.7
	M443K = M313C			
44-C	7.8	(69.0)	2000	5.0
44-E	7.8	(69.0)	3000	6.9
44-H	7.8	(69.0)	4500	10.3
	M444H = M314B			
46-B	10.9	(97.0)	1500	6.0

Shaft & Mounting

	Output Shaft Diameter x Extension Keyway Width x Length	Front Mounting
A	0.625 x 2.06 in Full Keyway 0.1875 x 1.375	Sq. Flange 4.30 in 2.5 in. Pilot (4) 0.344 in holes on 5.0 in. B.C.
D	**NEMA 42 – D Flange** 0.625 x 1.375 in Full Keyway 0.1875 x 1.00	Sq. Flange 4.30 in 2.187 in. Pilot (4) 0.281 in holes on 4.95 in. B.C.
E	**NEMA 56C – D Modified** 0.625 x 2.06 in Full Keyway 0.1875 x 1.50	Sq. Flange 6.0 in 4.5 in. Pilot, (4) 3/8-16 UNC-2B thread, 0.56 in deep holes on 5.875in BC & (4) 0.406 in holes on 7.00 in BC
M	**DIN Normal Tolerances** 19 x 40 mm Without Keyway	Sq. Flange109.2 mm 95 mm Pilot (4) 9 mm holes on 115 mm B.C.
N	**DIN Normal Tolerances** 19 x 40 mm Captive Keyway 6 x 30 mm	Sq. Flange109.2 mm 95 mm Pilot (4) 9 mm holes on 115 mm B.C.
P	**DIN 42955-R Tolerances** 19 x 40 mm Without Keyway	Sq. Flange109.2 mm 95 mm Pilot (4) 9 mm holes on 115 mm B.C.
R	**DIN 42955-R Tolerances** 19 x 40 mm Captive Keyway 6 x 30 mm	Sq. Flange109.2 mm 95 mm Pilot (4) 9 mm holes on 115 mm B.C.

Finish / Shaft Material

(Note 3)

0	FDA Food Grade White 2-part Epoxy / Short Shell / Stainless Steel (17-4)
1	FDA Food Grade Steel IT Short Shell / Stainless Steel (17-4)

Brake

(Electric Release)

0	Without Brake
B	24VDC 4.5 Nm 40 lb-in 131-011-0005

Winding Voltage

0	230V
2	460V

Commutation / Feedback Device

0	Without Feedback
2	2 Pole Brushless Pancake Resolver 1.04 Transformation 6.6kHz , 7.5Vrms Input Special Option (Consult Factory) EPN: 325-003-0007
5	2 Pole Brushless Pancake Resolver 0.5 Transformation 10kHz , 7.0Vrms Input EPN: 325-005-0015
A	2 Pole Brushless Pancake Resolver 0.25 Transformation 4kHz , 6.0Vrms Input EPN: 325-005-0008
B	2 Pole Brushless Pancake Resolver 0.5 Transformation 5.0kHz , 4Vrms Input EPN: 325-005-0005
D	Absolute, Heidenhain, EnDat Multi-turn
	Encoder 500kHz AM26LS31 RS422 Line Driver
E	1000 Lines / Rev
F	1024 Lines / Rev
G	2000 Lines / Rev
H	2048 Lines / Rev
M	4096 Lines / Rev
S	Absolute, Stegmann, Hiperface SRS50 – Single-Turn
T	Absolute, Stegmann, Hiperface SRM50 – Multi-Turn

Optional Sealing

0	Standard Shaft Seal IP67
E	Standard Shaft Seal with Front Face O-ring Groove and O-ring IP 67
F	Zero Maintenance Shaft Seal (aluminum) IP 67

Connection Method

2	(2) 1M Shielded Cables No Connectors Liquid Tight Strain Relief (not available on short shell motors)
5	(2) RDE Connectors Direct to Endbell with without Mating Connectors **$74**
7	(2) RDE Connectors Direct to Endbell with with Mating Connectors **$98**
	Custom Cable Length (up to 50 Ft) **$29 / FT**

MODEL NUMBER DEFINITION

M 4 [ ] [ ] - [ ] [ ] [ ] [ ] - [ ] [ ] [ ] [ ]

Notes:

1. Thermo switch rating 155degC in motor, each winding (3), normally closed contact.
2. Derate the motor continuous torque by 6% and use ½ listed current for 460V winding motors.
3. All food grade motors are smooth surface construction (finless).

*Conforms to latest applicable requirements of BISCC, 3-A SSI

Replaces all previous pricing sheets.
All data & prices are subject to change without notice.

Rev B (2-1-13) EDN: 057228
ECO: 006842 EPN: 307-640-0102C
(997-002-6469)