



FEATURES

- **Warranty:** 2 years
- **Overload Protection:** Automatic power shut-off will be activated in the event of a valve jam, thereby stopping any further damage to the valve and actuator.
- **Operational Safety:** The motor is equipped with F-grade insulation and a temperature control switch in the winding to detect motor temperature and prevent overheating, ensuring safe motor operation.
- **Voltage Protection:** Measures are in place to protect against both high and low voltage situations.
- **Applicable valve:** Ball Valve; Butterfly Valve
- **Anti-corrosion Protection:** The epoxy resin enclosure is compliant with NEMA 4X standards and can be customized with special customer paint.
- **Ingress Protection:** IP67 is standard, Optional: IP68 (Maximum 7m; Max: 72 hours)
- **Fireproofing Grade:** An enclosure that is both fireproof and able to withstand high temperatures, meeting diverse requirements in varying situations.

EFMB-1/2/3 SERIES INTRGRAL TYPE SMALL QUARTER TURN ELECTRIC ACTUATOR

The EOM series electric actuator is a type of motor that uses a multi-stage reduction gear, worm gear, and other mechanisms to generate rotational force. This force is then transmitted through the output shaft to switch valve devices by rotating them 90°. The actuator is mainly used to control the opening angle of valves, such as butterfly valves, ball valves, plug valves, etc. The EOM integral type has a torque range of 10-20000N.m, and the conventional electric actuator in the series operates without a clutch, making it durable and reliable. It has a stable stroke and effectively improves transfer efficiency.

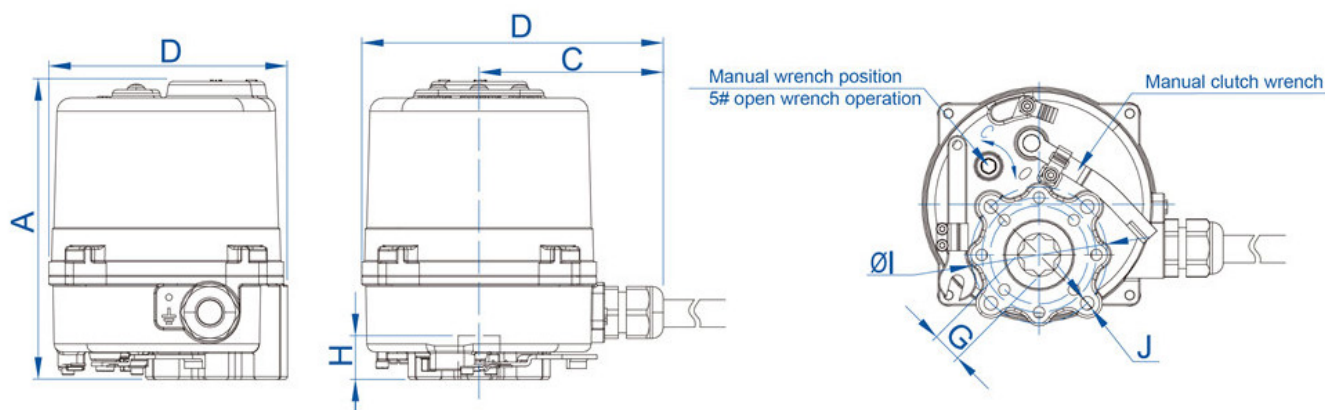


TECHNICAL DATA

Ambient Temperature	-25°C.....70 °C; Optional: -40°C.....60 °C
Ingress Protection	IP67, Optional: IP68 (Maximum 7m; Max: 72 hours)
Torque Range	10-30N.m
Applicable Voltage	1 phase:AC/DC24V / AC110V / AC220V / AC230V /AC240V

EFMB-1/2/3 SERIES INTRGRAL TYPE SMALL QUARTER TURN ELECTRIC ACTUATOR

Material of Actuator Body	Aluminum Alloy
Control Mode	On-off Type & Modulating Type
Torque Range	10-30N.m
Running Time	11-13s
Applicable Voltage	1 phase:AC/DC24V / AC110V / AC220V / AC230V /AC240V
Ambient Temperature	-25°C.....70 °C; Optional: -40°C.....60 °C
Anti-vibration Level	JB/T8219
Noise Level	Less than 75 dB within 1m
Ingress Protection	IP67, Optional: IP68(Maximum 7m; Max: 72 hours)
Connection Size	ISO5211
Motor Specifications	Class F, with thermal protector up to +135°C +275°F); Optional : Class H
On/off Type Signal	Input Signal: AC/DC 24 input control or AC 110/220v input control Signal Feedback: 1. Close the valve contact 2. Open the valve contact 3. Optional: Closing torque signal contact Local/ remote contacts 4. Integrated fault contact 4~20 mA to send Malfunction Feedback: Integrated fault alarm; Motor overheating Optional: Undercurrent protection contact
Modulating Type Signal	Input Signal: 4-20mA; 0-10V: 2-10V Input impedance: 250Ω (4-20mA) Output signal: 4-20mA; 0-10V: 2-10V Output impedance: ≤ 750Ω (4-20mA) Repeatability and linearity within ±1% of full valve stroke Signal Reverse: Support Loss Signal Mode Setting: Support Dead Zone: ≤2.5%
Working System	On-off Type: S2-15 min, no more than 600 times per hour start Modulating Type: S4-50% up to 600 times per hour start; Optional: 1200 times per hour
Indication	Indicator of pointer
Other Function	1. Phase correction (3-phase power supply only) 2. Torque protection 3. Motor overheat protection 4. Moisture - resistant heaters (anti-moisture device)



DIMENSION

MODEL	A	B	C	D	G	H	ØI	J	WEIGHT (kg)
EFMB-1	110	111	71	87	11x11	16	36	4-M5	1
EFMB-2							42	4-M5	
EFMB-3							50	4-M6	

EFMB-1/2/3 SERIES INTRGRAL TYPE SMALL QUARTER TURN ELECTRIC ACTUATOR

PERFORMANCE PARMETER

Model	Power (W)	Max Output Torque (N.m)		Max Output Torque (lbf.in)		Running time (Sec)				ISO 5211	Remarks
		AC 110 V AC 220 V AC/DC 24 V	AC 220 V AC 380 V 3 Phase	AC 110 V AC 220 V AC/DC 24 V	AC 220 V AC 380 V 3 Phase	50 Hz		AC/DC 24 V	Fail-safe		
						AC 110 V AC 220 V	AC 380 V 3 Phase				
EFMB-1	5	10	-	89	-	13	-	13	-	F03/F04/F05	Manual Wrench
EFMB-2	8	20	-	177	-	12	-	12	-		
EFMB-3	10	30	-	266	-	11	-	11	-		
EFM1-(H)	10	35	-	310	-	11	-	8		F03/F05/F07	Manual wrench options: Handwheel
EFMA-(H)		50	-	443	-	15	-	10			
EFMB-H		80	-	708	-	22	-	15			
EOM 2	40	100		885		19		14		F05/F07 F10/F12	Handwheel operation planetary gear mechanism
EOM 3		200		1770		39		28			
EOM 3A		300		2655		39		28			
EOM 4	90	400		3540		29		21		F10/F12/F14	
EOM 5		600		5310		39		28			
EOM 6		800		7080		47		34			
EOM 7	120	1000		8850		47		34		F12/F14/F16	
EOM 7A		1300		11505		47		34			
EOM 8		1700		15045		34		25			
EOM 8A	200	2000		17700		34		25	-	F14/F16	
EOM 9		2300		20355		47		34	-		
EOM 10		3500		30975		76		55	-		
EOM 11	5000		44250		105		76	-	F25		
EOM 12	8000		70800		143		103	-			
EOM 13	400	-	13000	-	115050	-	109	-		F25/F30	
EOM 14		-	16000	-	141600	-	129	-			
EOM 15		-	20000	-	177000	-	155	-			

Note: Standard configuration

1. Rated torque is 75% of the max torque.
2. Motor insulation is class F. Class H is optional.
3. The running time of 60 Hz is 5/6 of that of 50 Hz. The max output torque is teh same as above.
4. Above mentioned 3 phase output power doesn't apply to EFM1-(H), EFMA-(H).
5. For the above 3A/7A/8A/12 products, on/off type is S2-8min; modulating type is S4-15%.