



Electric
Valve
Actuators

S / L / OM / T / M / DM SERIES

- Spring Return Fail-safe
- Linear
- Quarter-turn
- Multi-turn
- SuperCap Fail-safe



Sun Yeh Electrical Ind. Co., Ltd. was established in 1986 and it is committed to continuous technical innovation, the most advanced product quality management, organizational excellence, and outstanding customer satisfaction.

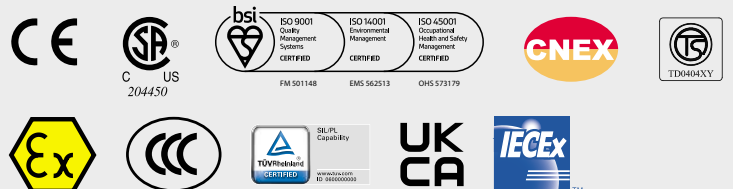
Our sustainable development drives the product line extension to include quarter-turn actuators, spring return fail-safe actuators, SuperCap fail-safe actuators, linear actuators, multi-turn actuators and explosion-proof actuators. Sun Yeh offers various products that can be widely applied to the control of industrial processes, fluid control, water treatment, HVAC, chemical engineering, food processing, tunnel ventilation and so on.



「Perfect solution」



Sun Yeh is dedicated to providing you with high-quality products, which have been certified with CE, CSA, CCC, ATEX, IECEX, CNEx, TS, UKCA, UKEx, JPEX and SIL approvals, as well as meet RoHS, REACH, and China RoHS environmental regulations, in addition to ISO 9001, ISO 14001, ISO 45001, and AEO.



SuperCap Fail-safe Electric Valve Actuators

Technical Data

Model	Torque		Weight		Nominal Motor Power	Motor Run Time	SuperCap Return Time	Manual Override	Flange Type
	Nm	in-lb	kg	lb	W	(Sec. / 90°)	(Sec. / 90°)		ISO 5211
DM-20	20	177	2.2	4.85	17	9	13	Lever	F03 F04 F05

• Running time is based on 110 V AC @ 60 Hz, Class B, floating control.

Product Overview

SuperCap fail-safe actuator offers a torque output of 20 Nm (177 in-lb), which uses supercapacitors to operate dampers or valves to a safe position (fully OPEN or CLOSED) when the power supply is lost, to achieve electronic fail-safe positioning function. It also has many other features, such as multi-voltage design, plug-and-play modular design, electronic torque limiting device, LED status / alarm indication, adjustable travel, and floating or modulating control.

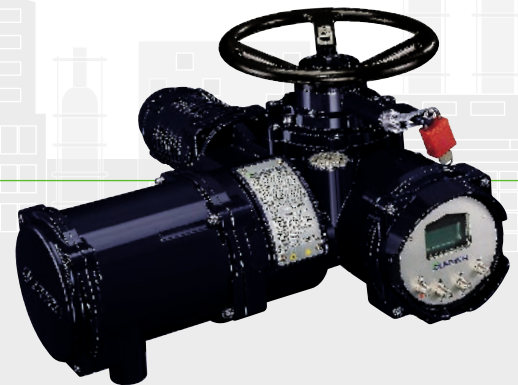


DM SERIES

Multi-turn Electric Valve Actuators

Product Overview

Sun Yeh M series multi-turn electric actuators are designed to provide output torque from 41 Nm to 100 Nm and output speed from 15 rpm to 120 rpm which fit with various types of valves. Come with a gearbox, the maximum output torque increases. In addition, the backlit LCD display and reed switches make the operation smoothly under different lighting conditions. The manual override allows for fast and simple manual positioning of valves. The manual override switch is simply toggled to engage the override system and disconnect the electrical control of the actuator.



M SERIES

Technical Data

Model	Output Speed	Factory Setting	Non-rising Stem					Rising Stem					Flange Type				
			Max. Torque		Max. Stem Dia.		Weight		Max. Thrust			Max. Stem Dia.		Weight			
			Nm	in-lb	mm	kg	lb	kgf	lbf	kN	mm	kg		lb			
M-41	40, 60, 80, 100, 120	80	41	363													
M-55	30, 45, 60, 75, 90	60	55	487	35	52	115	4080	8996	40	28	55	121.5	F10			
M-80	20, 30, 40, 50, 60	40	80	708													
M-100	15, 22, 30, 37, 45	30	100	885													

S

SERIES

Product Features

- Controls: On-Off, floating (optional), modulating (optional).
- Clutch-less manual override (optional).
- Dry-powder coated aluminum alloy enclosure conforms to corrosion class C3 (ISO 12944-2), NEMA Type 4X, 5 & IP68 for outdoor use.
- ISO 5211 mounting flange.
- Mechanical position indicator.
- Built-in motor thermal protection.



M

SERIES

Multi-turn Gearboxes

G201 Multi-turn Gearbox																				
Compatible Actuator Model	Output Speed of Actuator with Gearbox	Factory Setting	Non-rising Stem					Rising Stem					Flange Type							
			Max. Torque		Max. Stem Dia.	Weight		Max. Thrust		Max. Stem Dia.	Weight									
			Nm	in-lb	mm	kg	lb	kgf	lbf	kN	mm	kg		lb						
M-41	13, 20, 27, 33, 40	27	123	1090	40	22	48.5	7140	15744	70	32	25	55.1	F12						
M-55	10, 15, 20, 25, 30	20	165	1460											10200	22491	100	36	27.5	60.6
M-80	7, 10, 13, 17, 20	13	240	2125																

G202 Multi-turn Gearbox														
Compatible Actuator Model	Output Speed of Actuator with Gearbox	Factory Setting	Non-rising Stem					Rising Stem					Flange Type	
			Max. Torque		Max. Stem Dia.	Weight		Max. Thrust		Max. Stem Dia.	Weight			
			Nm	in-lb	mm	kg	lb	kgf	lbf	kN	mm	kg		lb
M-41	8, 12, 16, 20, 24	16	205	1815	45	25	55.1	10200	22491	100	36	27.5	60.6	F14
M-55	6, 9, 12, 15, 18	12	275	2435										
M-80	4, 6, 8, 10, 12	8	400	3540										

G203 Multi-turn Gearbox														
Compatible Actuator Model	Output Speed of Actuator with Gearbox	Factory Setting	Non-rising Stem					Rising Stem					Flange Type	
			Max. Torque		Max. Stem Dia.	Weight		Max. Thrust		Max. Stem Dia.	Weight			
			Nm	in-lb	mm	kg	lb	kgf	lbf	kN	mm	kg		lb
M-41	5.7, 8.6, 11.4, 14.3, 17.1	11.4	285	2520	60	32.5	71.6	15300	33737	150	44	36	79.4	F16
M-55	4.3, 6, 9, 11, 13	9	385	3410										
M-80	2.8, 4, 6, 7, 8.6	6	560	4960										
M-100	2.1, 3, 4, 5, 6.4	4	700	6200										

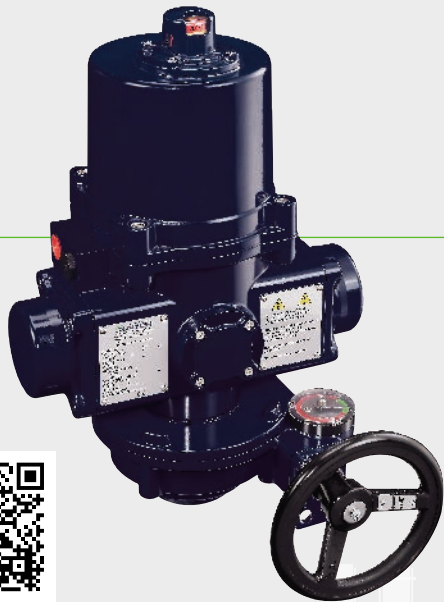


SE

SERIES



SE SERIES



Spring Return Fail-safe Electric Valve Actuators

Product Overview

S series spring return fail-safe electric actuators offer torque ranges from 50 Nm to 360 Nm (445 in-lb to 3185 in-lb). They are designed for the fail-safe positioning of valves or dampers upon loss of supply voltage and include On-Off control, floating control and modulating control. A rack and pinion spring mechanism is used to position the controlled device to either Fully OPEN or Fully CLOSED positions without any external power source. For On-Off type, a mechanical BUFFER is used at the end of the spring stroke to reduce the water hammer effects in pipes. A clutch-less manual override is optional to provide manual positioning of the controlled device.



S SERIES

Standard Specification

Model	Torque		Nominal Motor Power	Weight				Flange Type	Output Drive	Output Drive Depth
				Standard		W / Manual Override				
	Nm	in-lb	W	kg	lb	kg	lb	ISO 5211	mm	mm
S-500	50	445	50	27	60	37	82	F07	17	30
S-1300	130	1150	130	57	126	77	170	F10	22	41
S-2000	200	1770	130	93	205	131.5	290	F12	27	45
S-2600	260	2300	130	95	210	133.5	295	F12	27	45
S-3600	360	3185	130	103	228	152	336	F12	36	46

Explosion-proof Enclosure



With manual override

Without manual override

SE series explosion-proof spring return fail-safe electric actuators are structured as flame-proof and combustible dust-proof. The directive and standards marking is II 2 GD Ex db IIB T4 Gb, Ex db h IIB T4 Gb, Ex tb IIIC T130°C Db, Ex tb h IIIC T130°C Db where it is classified as Zone 1 or Zone 2, containing Group IIA and Group IIB gases, Zone 21 or Zone 22, containing the combustible dust atmospheres or a mixture of explosive gas atmospheres and combustible dust atmospheres. It is suitable for temperature classes T1 to T4.

TS Taiwan Hazardous Areas Certification

Marking	Ambient Temperature
Ex db IIB T4 Gb	-30°C to +70°C (-22°F to +158°F)
Ex tb IIIC T130°C Db	-30°C to +70°C (-22°F to +158°F)

Standards: IEC 60079-0, IEC 60079-1, IEC60079-31

CNEx China Hazardous Areas Certification / CCC

Marking	Ambient Temperature
Ex db IIB T4 Gb	-30°C to +70°C (-22°F to +158°F)
Ex tb IIIC T130°C Db	-30°C to +70°C (-22°F to +158°F)

Standards: GB / T3836.1, GB / T3836.2, GB / T3836.31

ATEX Hazardous Areas Certification for European Union / UKEx UK Hazardous Areas Certification

Directive	Marking	Ambient Temperature	
ATEX II 2GD	Ex db IIB T4 Gb (standard)	Ex db h IIB T4 Gb (with manual override)	-30°C to +70°C (-22°F to +158°F)
ATEX II 2GD	Ex tb IIIC T130°C Db (standard)	Ex tb h IIIC T130°C Db (with manual override)	-30°C to +70°C (-22°F to +158°F)

Standards: EN IEC 60079-0, EN 60079-1, EN 60079-31, EN ISO 80079-36, EN ISO 80079-37

IECEX Hazardous Areas Certification for International Market

Marking	Ambient Temperature	
Ex db IIB T4 Gb (standard)	Ex db h IIB T4 Gb (with manual override)	-30°C to +70°C (-22°F to +158°F)
Ex tb IIIC T130°C Db (standard)	Ex tb h IIIC T130°C Db (with manual override)	-30°C to +70°C (-22°F to +158°F)

Standards: IEC 60079-0, IEC 60079-1, IEC 60079-31, ISO 80079-36, ISO 80079-37

CSA Hazardous Locations Certification for North America

Zone System						
Code	Hazard Class	Permitted Zone	Equipment Protection Level (EPL)	Group	Temperature Class	Ambient Temperature
AEx / Ex	I	1	db	IIA, IIB	T4	-30°C to +70°C (-22°F to +158°F)
AEx / Ex	II	21	tb	IIIA, IIIB, IIIC	T130°C	-30°C to +70°C (-22°F to +158°F)

Standards: CAN / CSA-C22.2 No. 60079-0, CAN / CSA-C22.2 No. 60079-1, CAN / CSA-C22.2 No. 60079-31, ANSI / UL 60079-0, ANSI / UL 60079-1, ANSI / UL 60079-31

Division System				
Hazard Class	Permitted Zone	Group	Temperature Class	Ambient Temperature
I	1	C, D	T4	-30°C to +70°C (-22°F to +158°F)
II	1	E, F, G	T130°C	-30°C to +70°C (-22°F to +158°F)

Standards: CSA C22.2 No. 30-M1986, CSA C22.2 No. 25-17, FM 3600, FM 3615, FM 3616



L SERIES



L SERIES

Linear Electric Valve Actuators

Product Overview

L series linear electric actuators provide thrust ranges from 250 to 2,000 kgf (550 to 4410 lbf). All models are equipped with modulating controllers and are suitable for globe valves, gate valves and linear travel devices. They can be applied to HVAC and industrial processes, especially for steam and high temperature employments.

Product Features

- Self-locking gear system.
- DC motor utilized and built-in motor thermal protection.
- External stem position indicator.
- Low-power consumption.
- Dry-powder coated aluminum alloy enclosure conforms to corrosion class C3 (ISO 12944-2), NEMA Type 4X, 5 & IP67 for outdoor use.
- Manual override allows for fast and simple manual operation.
- Adjustable stroke allows actuator selection to match valve stem travel requirements.

Standard Specification

Model	Thrust			Weight		Nominal Motor Power	Flange Type	Max. Stroke	
	kgf	lbf	kN	kg	lb	W	ISO 5210	mm	inch
L-250	250	550	2.45	10.5	23.5	15	F07	50	2
L-500	500	1100	4.9	10.5	23.5	15	F07	50	2
L-1000	1000	2205	9.805	31.5	70	25	F10	100	4
L-2000	2000	4410	19.615	31.5	70	35	F10	100	4



LE SERIES



LE SERIES

LE series explosion-proof linear electric actuators are structured as flame-proof and combustible dust-proof. The directive and standards marking are II 2 GD Ex db IIB T4 Gb, Ex tb IIIC T130°C Db. They are control devices for valves and can be used in places, classified as Zone 1 or Zone 2, containing Group IIA and Group IIB gases, Zone 21 or Zone 22, containing combustible dust atmospheres or a mixture of explosive gas atmospheres and combustible dust atmospheres. It is suitable for temperature classes T1 to T4.

TS Taiwan Hazardous Areas Certification

Marking	Ambient Temperature
Ex db IIB T4 Gb	-30°C to +70°C (-22°F to +158°F)
Ex tb IIIC T130°C Db	-30°C to +70°C (-22°F to +158°F)

Standards: IEC 60079-0, IEC 60079-1, IEC60079-31

CNEx China Hazardous Areas Certification / CCC

Marking	Ambient Temperature
Ex db IIB T4 Gb	-30°C to +70°C (-22°F to +158°F)
Ex tb IIIC T130°C Db	-30°C to +70°C (-22°F to +158°F)

Standards: GB / T3836.1, GB / T3836.2, GB / T3836.31

ATEX Hazardous Areas Certification for European Union / UKEx UK Hazardous Areas Certification

Directive	Marking	Ambient Temperature
ATEX II 2GD	Ex db IIB T4 Gb	-30°C to +70°C (-22°F to +158°F)
ATEX II 2GD	Ex tb IIIC T130°C Db	-30°C to +70°C (-22°F to +158°F)

Standards: EN IEC 60079-0, EN 60079-1, EN 60079-31

IECEx Hazardous Areas Certification for International Market

Marking	Ambient Temperature
Ex db IIB T4 Gb	-30°C to +70°C (-22°F to +158°F)
Ex tb IIIC T130°C Db	-30°C to +70°C (-22°F to +158°F)

Standards: IEC 60079-0, IEC 60079-1, IEC60079-31

CSA Hazardous Locations Certification for North America

Zone System						
Code	Hazard Class	Permitted Zone	Equipment Protection Level (EPL)	Group	Temperature Class	Ambient Temperature
AEx / Ex	I	1	db	IIA, IIB	T4	-30°C to +65°C (-22°F to +149°F)
AEx / Ex	II	21	tb	IIIA, IIB, IIIC	T130°C	-30°C to +65°C (-22°F to +149°F)

Standards: CAN / CSA-C22.2 No. 60079-0, CAN / CSA-C22.2 No. 60079-1, CAN / CSA-C22.2 No. 60079-31, ANSI / UL 60079-0, ANSI / UL 60079-1, ANSI / UL 60079-31

Quarter-turn Electric Valve Actuators

OM & T SERIES



OM SERIES



T SERIES

Product Overview

OM & T series quarter-turn electric actuators provide torque ranges from 6 Nm to 4,500 Nm (53 in-lb to 40,000 in-lb). All models are equipped with a mechanical position indicator, except T-6 and T-15. A major feature is the clutch-less manual override design (except T-6 and T-15) which allows the manual operation (except OM-A and BM-2) to be operated without brake or clutch. This design increases the mechanical reliability.

Standard Specification

Model	Torque		Weight		Nominal Motor Power	Running Time	Manual Override	Flange Type
	Nm	in-lb	kg	lb	W	(Sec. / 90°)		ISO 5211
T-6	6	53	1.5	3.3	5	8		F03 / F05
T-15	15	132	1.5	3.3	5	19	Lever	F03 / F05
OM-1	35	310	2	4.4	10	12		F03 / F05
OM-A	50	445	3	6.6	10	27	N / A	F05 / F07
OM-AM	50	445	3	6.6	10	27	Lever	F05 / F07
OM-F	65	575	11	24.3	60	6	Handwheel	F07 / F10
OM-J	80	708	3	6.6	5	130	Lever	F05 / F07
OM-2	90	800	10.5	23.1	40	17	Handwheel	F07 / F10
BM-2	120	1065	5.5	12.1	40	9	N / A	F07
OM-G	120	1065	11	24.3	60	8		F07 / F10
OM-3	150	1330	10.5	23.1	40	26		F07 / F10
OM-H	300	2655	15	33.1	60	24		F07 / F10
OM-4	400	3540	20	44.1	80	19		F10 / F12
OM-5	500	4430	20	44.1	80	26		F10 / F12
OM-6	650	5755	20	44.1	80	34		F10 / F12
OM-7	1000	8855	36	79.4	120	50	Handwheel	F12 or F14
OM-8	1500	13280	36	79.4	120	51		F12 or F14
OM-9	2000	17710	68.5	151	180	62		F14 or F16
OM-10	2500	22140	68.5	151	180	62		F14 or F16
OM-11	3000	26565	68.5	151	180	62		F14 or F16
OM-12	3500	31000	68.5	151	220	62		F14 or F16
OM-13	4500	40000	102.5	226	220	88		F16 / F25

• Running time is based on 110 V AC @ 60 Hz, 30% duty cycle, On-Off / Floating control.

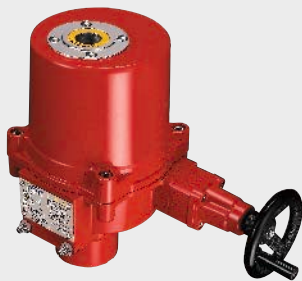
Product Features

- Self-locking gear system.
- Dry-powder coated aluminum alloy enclosure conforms to corrosion class C3 (ISO 12944-2), NEMA Type 4X, 5, IP66 (except OM-J and BM-2) & IP67 for outdoor use.
- ISO 5211 mounting flange.
- Mechanical stops. (except T-6 / 15, OM-1 / A / AM / J / BM-2)
- Mechanical position indicator. (except T-6 / 15)
- Built-in motor thermal protection.

Explosion-proof Enclosure



OME SERIES



OME SERIES

OME series explosion-proof quarter-turn electric actuators are structured as flame-proof and combustible dust-proof. The directive and standards marking are II 2 GD Ex db IIB T4 Gb, Ex tb IIIC T130°C Db. They are classified as Zone 1 or Zone 2, containing Group IIA and Group IIB gases, Zone 21 or Zone 22, containing combustible dust atmospheres or a mixture of explosive gas atmospheres and combustible dust atmospheres. It is suitable for temperature classes T1 to T4.

TS Taiwan Hazardous Areas Certification

Marking	Ambient Temperature
Ex db IIB T4 Gb	-30°C to +70°C (-22°F to +158°F)
Ex tb IIIC T130°C Db	-30°C to +70°C (-22°F to +158°F)

Standards: IEC 60079-0, IEC 60079-1, IEC60079-31

CNEX China Hazardous Areas Certification / CCC

Marking	Ambient Temperature
Ex db IIB T4 Gb	-30°C to +70°C (-22°F to +158°F)
Ex tb IIIC T130°C Db	-30°C to +70°C (-22°F to +158°F)

Standards: GB / T3836.1, GB / T3836.2, GB / T3836.31

ATEX Hazardous Areas Certification for European Union / UKEx UK Hazardous Areas Certification

Directive	Marking	Ambient Temperature
ATEX II 2GD	Ex db IIB T4 Gb	-30°C to +70°C (-22°F to +158°F)
ATEX II 2GD	Ex tb IIIC T130°C Db	-30°C to +70°C (-22°F to +158°F)

Standards: EN IEC 60079-0, EN 60079-1, EN 60079-31

IECEx Hazardous Areas Certification for International Market

Marking	Ambient Temperature
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Standards: IEC 60079-0, IEC 60079-1, IEC60079-31

CSA Hazardous Locations Certification for North America

Zone System						
Code	Hazard Class	Permitted Zone	Equipment Protection Level (EPL)	Group	Temperature Class	Ambient Temperature
AEx / Ex	I	1	db	IIA, IIB	T4	-30°C to +70°C (-22°F to +158°F)
AEx / Ex	II	21	tb	IIIA, IIB, IIIC	T130°C	-30°C to +70°C (-22°F to +158°F)

Standards: CAN / CSA-C22.2 No. 60079-0, CAN / CSA-C22.2 No. 60079-1, CAN / CSA-C22.2 No. 60079-31, ANSI / UL 60079-0, ANSI / UL 60079-1, ANSI / UL 60079-31

Division System				
Hazard Class	Permitted Zone	Group	Temperature Class	Ambient Temperature
I	1	C, D	T4	-30°C to +70°C (-22°F to +158°F)
II	1	E, F, G	T130°C	-30°C to +70°C (-22°F to +158°F)

Standards: CSA C22.2 No. 30-M1986, CSA C22.2 No. 25-17, FM 3600, FM 3615, FM 3616



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