

### General Description

The OM series is a robust range of 1/4 turn electric actuators suitable for the on/off activation of Ball or Butterfly valves.

A powerful motor with inbuilt thermal protection drives a pre-lubricated heavy duty steel gear train running in bronze bushes. They are encased in a powder coated die cast protective housing that has an IP67 rating (dust tight and submersible for limited periods). All models have a visual position indicator and a manual override.

The ISO 5211 mounting and female square drive allows direct coupling to valves with a similar configuration.

Standard models drive through 90° and can be fitted with voltage free contacts for end of stroke feedback.

Positioner models with 4-20mA or 2-10v modulating control are also available in all sizes.

### Standard features

IP67 weatherproof rating and Humidity up to 95%

Ambient temp. -5°C... +60°C

Duty cycle is 30% to 75% depending on ambient temperature, voltage and actuator model, and relates to the 135°C thermal motor protection. (some modulating versions have a 75% duty cycle)

Always allow a 35% safety margin when sizing torque requirements.

### Optional Features

Torque limit switch (overload protection)

Anti-condensation heater - 15 watt

Two SPDT voltage free micro switches and cams (end of stroke feedback)

Potentiometer and position transmitter (4-20mA feedback)

Modulating control (4-20mA or 2-10v input and feedback)



OM-1

OM-2

See overpage for applications warning. It is the responsibility of the user to determine suitability of the seat and body materials to the application.

MODEL	TORQUE Nm	TIME (sec) 90°		(AMP) 12v AC/DC		(AMP) 24v AC/DC		(AMP) 110v AC		(AMP) 240v AC		(AMP) 415v	
		AC	DC	Run	Start	Run	Start	Run	Start	Run	Start	Run	Start
OM-1	35	13*	15	0.5	.3	0.6	0.8	0.5	1.5	0.3	1	-	-
OM-AL	50	24*	24	0.5	3	0.7	0.8	0.5	1.5	0.3	1	-	-
OM-2	90	17	15	3.4	5	3	5	1	3	0.5	1.5	0.4	1.3
OM-3	150	26	22	3.4	5	3	5	1	3	0.5	1.5	0.4	1.3
OM-4	400	18	16	7.5	12	6	8	1.3	3.1	0.6	1.5	0.8	2.5
OM-5	500	25	22	8.0	13	6.5	8	1.5	3	0.7	1.5	0.8	2.5
OM-6	650	31	28	8.5	14	7.5	8	1.8	3	0.8	1.5	0.8	2.5
OM-7	1000	55	46	-	-	7	8	3.2	12	1.6	4	0.4	0.6
OM-8	1500	55	46	-	-	7.5	8	4	14	2	3.6	0.6	0.8
OM-9	2000	70	58	-	-	7	8	3.2	12	1.6	5	0.4	0.6
OM-10	2500	70	58	-	-	7.5	8	4	12	2	4	0.4	0.6
OM-11	3000	70	58	-	-	10	10	3	10	1.6	4	0.6	0.8
OM-12	3500	70	58	-	-	15	15	4	14	2.2	4	0.6	0.8

\*For 24VAC use the DC Speeds

### How to Order

Series OM  OM  -  1  -  1

**Actuator**

Model	Operation	Model	Operation
1	on/off	1M	Modulating
AL	on/off	AM	Modulating
2	on/off	2M	Modulating
3	on/off	3M	Modulating
4	on/off	4M	Modulating
5	on/off	5M	Modulating
6	on/off	7M	Modulating
8	on/off		
9	on/off		
10	on/off		
11	on/off		
12	on/off		

4-20mA  
1-5v DC  
2-10v DC  
by internal selector switch

**Optional Extras**

- LS Extra limit switches (2off)
- H Anti-condensation heater
- TL Torque Limit Switch
- P Potentiometer
- PT Potentiometer & Transmitter
- LR Local or Remote Control

**Electric Operation**

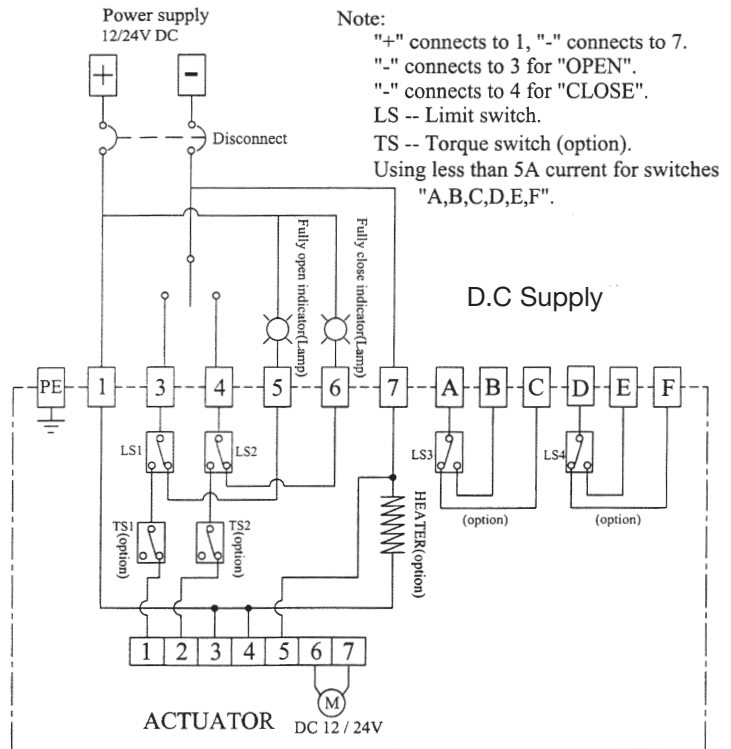
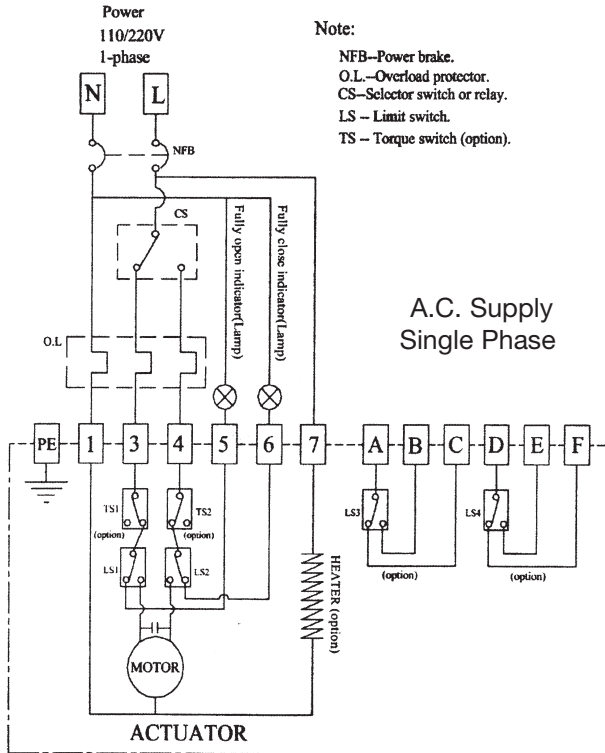
- E1 - 240v AC
- E2 - 110v AC
- E5 - 24v AC
- E7 - 12v DC
- E8 - 24v DC
- E11 - 415v AC

### APPROVALS

ISO-9001  
CE - European Approval  
C Tick - N1761

- IP67 protection when mounted with drive shaft from vertical (as shown in photo) to slightly above horizontal. Never mount actuator below horizontal.

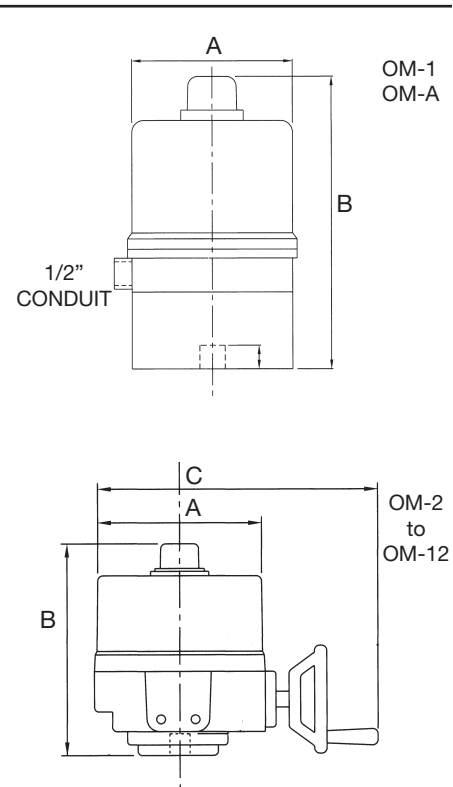
## Typical Wiring Diagram



For 3 phase circuit or modulating circuit consult factory.  
 Do not connect multiple units in series or parallel. Consult Process Systems for circuit.  
**NOTE:** Typical circuits - Contact Process Systems for specific acuator details.  
 - Circuit diagram supplied with actuator.

### Basic dimension (For more detail consult Process Systems)

MODEL	DIMMENSION MM			ISO 5211 MOUNTING	SQ. DRIVE FEMALE	ADJ. STOPS	MANUAL OVERRIDE
	A	B	C				
OM-1	108	155	-	FO3 / FO5	14mm	NO	Spanner Drive
OM-AL	108	200	-	FO7	14mm	NO	Lever
OM-2	200	290	330	FO7	22mm	✓	Handwheel
OM-3	200	290	330	FO7	22mm	✓	"
OM-4	234	315	380	F10	35mm	✓	"
OM-5	234	315	380	F10	35mm	✓	"
OM-6	234	315	380	F10	35mm	✓	"
OM-7	234	420	520	F12 / F14	∅ 65mm	✓	"
OM-8	234	420	520	F12 / F14	∅ 65mm	✓	"
OM-9	260	590	540	F14 / F16	∅ 75mm	✓	"
OM-10	260	590	540	F14 / F16	∅ 75mm	✓	"
OM-11	260	590	540	F14 / F16	∅ 75mm	✓	"
OM-12	260	590	540	F14 / F16	∅ 75mm	✓	"



THIS DATA SHEET CAN BE DOWNLOADED FROM OUR WEBSITE

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#### WARNING

These products are intended for use in industrial applications only. Do not use these products where pressures and temperatures can exceed those listed under 'Technical Data' and in our individual 'Series' data sheets. Before using these products with fluids other than those specified, for non-industrial applications, life-support systems, or other applications not within published specifications, consult Process Systems Pty Ltd.

Through misuse, age, or malfunction, components used in industrial valve applications can fail in various modes. The system designer is warned to consider the failure modes of all component parts used in industrial valve applications and to provide adequate safeguards to prevent personal injury or damage to equipment in the event of such failure.

**System designers must provide a warning to the user in the system instructional manual if protection against a failure mode cannot be adequately provided.**

System designers and end users are cautioned to review specific warnings or specifications found in instruction sheets or labels packed or attached and shipped with the products.

Our policy is one of continuous research and development. We therefore reserve the right to amend without notice the specifications given in this document or our individual 'Series' data sheets.

#### WARRANTY INFORMATION

Series OM and all other products manufactured or distributed by Process Systems Pty. Ltd. are warranted by Process Systems to be free of defects in material and workmanship for a period of 1 year from the date of purchase or as the manufacturer warrants. Process Systems obligation under this warranty is limited to repair or replacement of the defective product or refund of the purchase price paid solely at the discretion of Process Systems and provided such defective product is returned to Process Systems freight prepaid and upon examination by Process Systems such product is found defective. This warranty shall be void in the event that the product has been subject to misuse, misapplication, improper maintenance, modification or tampering. This warranty is expressed in lieu of all other warranties, expressed or implied from Process Systems Pty. Ltd. representatives or employees. Process Systems reserves the right to change Valve and Brochure specifications without notice.