TI-P358-14 CH Issue 4



EL7200 Series Electric Actuators

Description

EL7200 series electric actuators are available for use with the following supply voltages: 230 Vac, 115 Vac and 24 Vac. This range of electric actuators has three user-configurable control modes as standard:

- (VMD) Valve Motor Drive,
- (0/4 20 mA) modulating control or
- (0/2 10 Vdc) modulating control.

When they have been fitted to a control valve they provide modulating control or on/off action.

EL7200 series electric actuators can be used with the following valves:

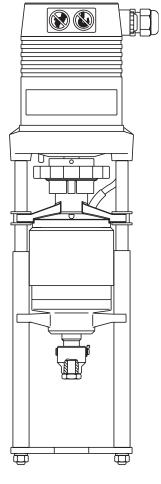
2	Spira-trol™	
2-port	BX, BM, SB, KA, KB, KC and NS	
2	TW valves (DN20 - DN50)	
3-port	QLD and QLM (DN15 - DN50)	
	Mounting flange (DN15 - DN50)	EL7021
EL7200	Linkage LE, KE Series (DN15 - DN50)	EL7020
Adaptor	For self-acting valves (DN15 - DN50)	EL7012

Operation

The drive mechanism consists of a stepper motor and a planetary gearbox that converts a rotary motion to a linear motion. An integrally installed contactless hall-sensor for permanent positioning control, switches off the motor in the maximum travel position of the valve.

Options and accessories

IP65 construction.
24 Vdc motor for rectified ac.



EL7211A-SE

Technical data

Model	EL7211A-SE	EL7212A-SE	EL7213A-SE
Supply voltage	230 Vac	115 Vac	24 Vac
Frequency Hz		50 / 60 Hz ± 5%	
Travel		20 mm	
Power consumption VA	20 VA	25 VA	20 VA
Enclosure rating		IP54	
Actuator speed		0.17 - 0.25 mm/s	
Actuator thrust		1.0 kN	
Ambient limitations		-10 °C to + 60 °C	
Motor		Stepper motor	
Terminations		1.5 mm	
Conduit entries		1 x M16 x 1.5 1 x M20 x 1.5	
Control signal		0 - 10 Vdc 2 - 10 Vdc 4 - 20 mA VMD	
Spring reserve		Yes	
Manual override		Yes	

Maximum differential pressures for Class IV shut-off (metal-to-metal)

KE, LE, KEA and LEA with PTFE or Graphite stem seal

Valve size			DN15		DN20		DN25		DN32		DN40		DN50	
	Kv			4.0		6.3		10		6	25		36	
Valve travel				20 mm										
	Actuator type			Differential pressure (bar)										
Valve type		Voltage	PTFE	Graphite	PTFE	Graphite	PTFE	Graphite	PTFE	Graphite	PTFE	Graphite	PTFE	Graphite
KE 2-port	EL7211A-SE	230	29.7	14.8	22	10	12	4.8	10.3	4.2	2.6		1.2	
and LE 2-port	EL7212A-SE	115	29.7	14.8	22	10	12	4.8	10.3	4.2	2.6		1.2	
	EL7213A-SE	24	29.7	14.8	22	10	12	4.8	10.3	4.2	2.6		1.2	

Maximum differential pressures for Class VI shut-off (soft seal)

KE, LE, KEA and LEA with PTFE or Graphite stem seal

	Valve size Kv			DN15 4.0		DN20 6.3		DN25		DN32		DN40 25		150
														6
Valve travel			20 mm											
				Differential pressure (bar)										
Valve type	Actuator type	Voltage	PTFE	Graphite	PTFE	Graphite	PTFE	Graphite	PTFE	Graphite	PTFE	Graphite	PTFE	Graphite
KE 2-port	EL7211A-SE	230	40	29.7	35	23.2	23	15.5	18	11.9	7.7	5.1	5.5	3.6
and LE 2-port	EL7212A-SE	115	40	29.7	35	23.2	23	15.5	18	11.9	7.7	5.1	5.5	3.6
	EL7213A-SE	24	40	29.7	35	23.2	23	15.5	18	11.9	7.7	5.1	5.5	3.6

Maximum differential pressures for Modulating duty only

QLD and QLM 3-port valves with PTFE or Graphite stem seal

Valve size			DN15		DN20		DN25		DN32		DN40		DN50	
	Kv				6	6.3		0	16		25		3	6
Valve travel			20 mm											
				Differential pressure (bar)										
Valve type	Actuator type	Voltage	PTFE	Graphite	PTFE	Graphite	PTFE	Graphite	PTFE	Graphite	PTFE	Graphite	PTFE	Graphite
QLD 3-port	EL7211A-SE	230	26.6	12	26.6	12	15.3	6.4	9.2	3.7	5.6	2	3.2	1
and QLM 3-port	EL7212A-SE	115	26.6	12	26.6	12	15.3	6.4	9.2	3.7	5.6	2	3.2	1
	EL7213A-SE	24	26.6	12	26.6	12	15.3	6.4	9.2	3.7	5.6	2	3.2	1

Materials

No.	Part	Material
1	Actuator case	Glass filled Polymer
2	Handwheel	POM
3	Cable inlet	PA
4	Pillar	
5	Linkage	Steel BZP passivated
6	Mounting flange	

Dimensions / weights (approximately) in mm and kg

Actuator range	Α	В	C*	Weight
EL7211A-SE	471	100	140	3.0
EL7212A-SE	471	100	200	3.0
EL7213A-SE	446	100	200	3.0

^{*} Actuator cover removal distance

EL7200 series selection guide

Ordering a control valve

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Туре	EL	=	Electric	EL
Series	7	=	7000 series	7
Actuator thrust	2	=	1.0 kN	2
Actuator travel	1	=	20	1
	1	=	230 Vac	
Voltage	2	=	115 Vac	1
	3	=	24 Vac	
Control mode	Α	=	0/4 - 20 mA + 0/2 - 10 Vdc + VMD	Α
Failure mode	SE	=	Spring extend	SE

How to order

Example: 1 off EL7211A-SE 230 Vac electric actuator with spring extend.

Spares

Spare parts are available as indicated. No other parts are available as spares.

Linkage (DN15 to DN50)	5
Mounting flange (DN15 to DN50)	6

How to order spares

Always order spares by using the description given above and state exactly which product they are for.

Example: 1 - Mounting flange for a EL7211A-SE 230 Vac electric actuator.

