

TI-P358-14

CH Issue 3

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

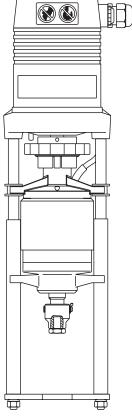
0	SPIRA-TROL							
2-port	BX, BM, SB, KA, KB, KC and NS							
2 ====	TW valves (DN20 - DN50)							
3-port	QLD and QLM (DN15 - DN50)							
EL 7000	Mounting flange	(DN15 - DN50)	EL7021					
EL7200	Linkage LE, KE Series	(DN15 - DN50)	EL7020					
Adaptor	For self-acting valves	(DN15 - DN50)	EL7012					

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	1	0	1	6	25		3	6
	Valv	ve travel						20 :	mm					
					1		Diffe	rential p	ressure	(bar)	1			1
Valve type	Actuator 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		DN	115	DN20		DN	125	DN32		DN40		DN50		
		Kv	4	.0	6	.3	1	0	1	6	25		36	
	Valv	e travel						20 ı	mm					
							Diffe	rential p	ressure	(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		DN	l15	DN	120	DN	125	DN	132	DN	140	DN	150	
		Kv	4.	.0	6	6.3		10		6	25		3	6
	Val	ve travel						20 ı	mm					
				1	ı	1	Diffe	rential p	ressure	(bar)	1	ı	ı	1
Valve type	Actuator type	Voltage	PTFE	Graphite	PTFE	Graphite	PTFE	Graphite	PTFE	Graphite	PTFE	Graphite	PTFE	Graphite
0.00	EL7211A-SE	230	26.6	12	26.6	12	15.3	6.4	9.2	3.7	5.6	2	3.2	1
QLD 3-port 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	РОМ			
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

Туре	EL = Electric	EL
Series	7 = 7000 series	7
Actuator thrust	2 = 1.0 kN	2
Actuator travel	1 = 20	1
Voltage	1 = 230 Vac 2 = 115 Vac 3 = 24 Vac	1
Control mode	A = 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 part	s 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.

