

spirax sarco

TI-P358-25
 CH Issue 3

AEL5 Series Electric Linear Actuators for DN15 to DN100 Control Valves

Description

The AEL5 series electric actuators are reversible having linear output.

Available types

AEL5 actuators are available with 4 supply variants, **230 Vac**, **115 Vac**, **24 Vac** and **24 Vdc** all being suitable for a VMD (Valve Motor Drive) input power signal. At extra cost, actuators can be fitted with a positioner input card that can accept a 4 - 20 mA or 2 - 10 Vdc control signal - Please note that this option is not available for the 24 Vdc supply variant.

AEL5 actuators can be ordered with or without a potentiometer, those ordered with will be fitted with a 1 kΩ potentiometer as standard. The potentiometer can be used in conjunction with the positioner for a 2 - 10 V or 4 - 20 mA input signal, or as feedback for VMD. Also available are auxiliary limit switches and anti-condense heater. See TI-P358-28 for further details on the accessories.

These actuators can be used with the following valves, in conjunction with an appropriate valve adaptor and mounting flange.

Valves	2-port SPIRA-TROL or C Series
	3-port QL33, QL43, QL63 and QL73 mixing and diverting valves

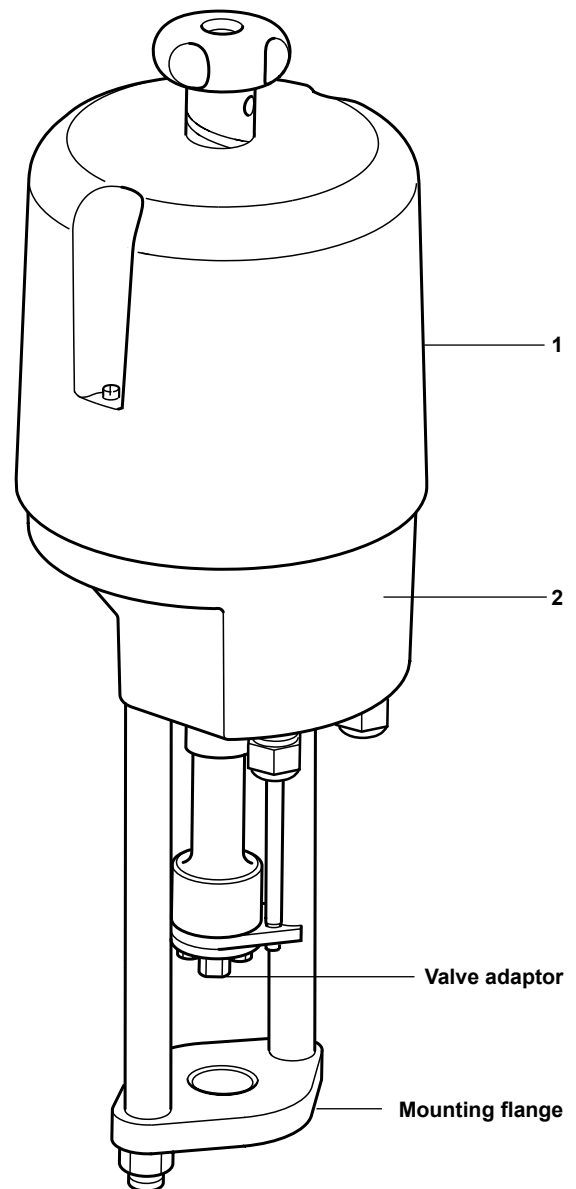
Note: A mounting flange and valve adaptor is required to mount the actuator to a valve. See the associated tables below:

Mounting flange selection

Valve type and size	Actuator	
	AEL51_ AEL52_ AEL53_ AEL54_ AEL55_	AEL56_
KE and KEA LE and LEA QL DN15 to DN50	EL5970	
LE and LEA DN65 to DN100	EL5971	
KE and KEA QL DN65 to DN100	EL5971	EL5972
JE and JEA DN15 to DN50	EL5971 J	
DN65 to DN100	EL5972 J	EL5972

Materials

No.	Part	Material
1	Case	1 to 8 kN Polycarbonate 14 to 25 kN Die-cast aluminium
2	Housing	Die-cast aluminium



Valve adaptor selection

Valve type and size	Valve stem	AEL51_	AEL52_	AEL53_	AEL54_	AEL55_	AEL56_
KE and KEA LE and LEA QL DN15 to DN50	M8 thread	AEL6911	AEL6911	AEL6911	AEL6911	AEL6911	
DN65 to DN100	M12 thread	Integrated	Integrated	Integrated	Integrated	Integrated	EL5945
JE and JEA DN15 to DN50	M8 thread	AEL6911 J	AEL6911 J	AEL6911 J	AEL6911 J	AEL6911 J	
DN65 to DN100	M12 thread	AEL6912 J	AEL6912 J	AEL6912 J	AEL6912 J	AEL6912 J	EL5945

Technical data

Actuator type	AEL51_	AEL52_	AEL53_	AEL54_	AEL55_	AEL56_
Supply voltage	230 Vac, 115 Vac, 24 Vac, (24 Vdc) ±10%					
Supply frequency	50 Hz / 60 Hz / (continuous)					
Maximal power consumption VA Note: power consumption is relative to 50/60 Hz / (continuous) respectively	25.5 / 25.9 / (41)	37 / 40 / (24)	44 / 47 / (41)	72 / 68 / (41)	53 / 55 / (93)	100 / 86 / (NA)
Stroke mm	50	50	50	50	65	100
Actuator speed mm/s Note: Speed is relative to 50/60 Hz / (continuous) respectively	0.25 / 0.3 / (1)	0.5 / 0.6 / (0.5)	0.5 / 0.6 / (1)	0.65 / 0.78 / (0.5)	0.45 / 0.54 / (0.5)	1 / 1.2 / (1)
Enclosure rating	IP65 (for outdoor installations provide adequate shelter)					
Actuator trust kN	1	2	4.5	8	14	25
Ambient limits	-20°C to 60°C (Caution: -20°C to 50°C with positioner card fitted)					
Motor	Synchronous motor for 1 to 14 kN, Asynchronous motor for 25 kN (Alternative current) or Brushed direct current motor (Direct current)					
Terminations	1.5 mm ²					
Manual override	Handwheel					
Conduit entries	2 x M20 x 1.5 (for 1 to 14 kN) and 3 x M20 x 1.5 (for 25 kN)					
Positioner power consumption VA	1					

For alternative speed versions please contact Spirax Sarco

Approvals

This equipment is CE marked and conforms to the following:

- EN 50081-1 and EN 50082-2 (EMC)
- EN 61010-1/A2 (Safety), following the provisions of directives 89/336/EEC amended by 92/31/EEC and 93/68/EEC (EMC) and 72/73/EEC amended by 93/68/EEC (LVD).

**Maximum differential pressures for modulating duties only -
KE, LE, KEA and LEA 2-port valves**

For pure control applications providing control across the full valve operating range, but not guaranteeing shut-off to a greater level than the minimum flowrate based on the valve 50:1 turndown.

with PTFE or Graphite stem seal

Valve size		DN15	DN20	DN25	DN32	DN40	DN50	DN65	DN80	DN100									
Kv		4.0	6.3	10	16	25	36	63	100	160									
Valve travel		20 mm						30 mm											
Actuator	Voltage	Maximum differential pressure bar																	
		PTFE	Graphite	PTFE	Graphite	PTFE	Graphite	PTFE	Graphite	PTFE	Graphite	PTFE	Graphite	PTFE	Graphite	PTFE	Graphite	PTFE	Graphite
AEL51211	230	40	29.8	35	23.5	23	15.7	18	12	7.9	5.2	5.6	3.7	3	1.2	1.9	0.7	1.2	0.4
AEL51212	115	40	29.8	35	23.5	23	15.7	18	12	7.9	5.2	5.6	3.7	3	1.2	1.9	0.7	1.2	0.4
AEL51213	24	40	29.8	35	23.5	23	15.7	18	12	7.9	5.2	5.6	3.7	3	1.2	1.9	0.7	1.2	0.4
AEL52211	230	40		40		40		38.7	32.5	16.7	14	11.9	10	6.5	4.7	4.1	3	2.6	1.8
AEL52212	115	40		40		40		38.7	32.5	16.7	14	11.9	10	6.5	4.7	4.1	3	2.6	1.8
AEL52213	24	40		40		40		38.7	32.5	16.7	14	11.9	10	6.5	4.7	4.1	3	2.6	1.8
AEL53211	230					40		40		38.8	36	27.6	25.7	15.3	13.5	9.8	8.6	6.1	5.4
AEL53212	115					40		40		38.8	36	27.6	25.7	15.3	13.5	9.8	8.6	6.1	5.4
AEL53213	24					40		40		38.8	36	27.6	25.7	15.3	13.5	9.8	8.6	6.1	5.4
AEL54211	230							40		40		40		27.7	25.9	17.7	16	11	10.3
AEL54212	115							40		40		40		27.7	25.9	17.7	16	11	10.3
AEL54213	24							40		40		40		27.7	25.9	17.7	16	11	10.3
AEL55311	230											40		40		31.3	30.2	19.5	18.8
AEL55312	115											40		40		31.3	30.2	19.5	18.8
AEL55313	24											40		40		31.3	30.2	19.5	18.8
AEL56411	230													40		40		35	34.3
AEL56412	115													40		40		35	34.3
AEL56413	24													40		40		35	34.3

with Bellows and PTFE or Graphite stem seal

Valve size		DN15	DN20	DN25	DN32	DN40	DN50	DN65	DN80	DN100									
Kv		4.0	6.3	10	16	25	36	63	100	160									
Valve travel		20 mm						30 mm											
Actuator	Voltage	Maximum differential pressure bar																	
		PTFE	Graphite	PTFE	Graphite	PTFE	Graphite	PTFE	Graphite	PTFE	Graphite	PTFE	Graphite	PTFE	Graphite	PTFE	Graphite	PTFE	Graphite
AEL52211	230	19.8	4.9	15.7	3.9	10.5	2.6	8.1	2.0	3.5	0.8	2.5	0.6						
AEL52212	115	19.8	4.9	15.7	3.9	10.5	2.6	8.1	2.0	3.5	0.8	2.5	0.6						
AEL52213	24	19.8	4.9	15.7	3.9	10.5	2.6	8.1	2.0	3.5	0.8	2.5	0.6						
AEL53211	230	40		40		40		40		25.5	22	18.2	16.3	7.9	6.1	5	3.9	3.1	2.4
AEL53212	115	40		40		40		40		25.5	22	18.2	16.3	7.9	6.1	5	3.9	3.1	2.4
AEL53213	24	40		40		40		40		25.5	22	18.2	16.3	7.9	6.1	5	3.9	3.1	2.4
AEL54211	230							40		40		40	38.5	20.3	18.5	13	11.8	8.1	7.3
AEL54212	115							40		40		40	38.5	20.3	18.5	13	11.8	8.1	7.3
AEL54213	24							40		40		40	38.5	20.3	18.5	13	11.8	8.1	7.3
AEL55311	230									40		40		40	39.8	26.5	25.4	16.6	15.9
AEL55312	115									40		40		40	39.8	26.5	25.4	16.6	15.9
AEL55313	24									40		40		40	39.8	26.5	25.4	16.6	15.9
AEL56411	230											40		40		40		32.1	31.3
AEL56412	115											40		40		40		32.1	31.3
AEL56413	24											40		40		40		32.1	31.3

**Maximum differential pressures for class IV shut-off -
KE, LE, KEA and LEA 2-port valves**

with PTFE or Graphite stem seal

Valve size		DN15	DN20	DN25	DN32	DN40	DN50	DN65	DN80	DN100									
Kv		4.0	6.3	10	16	25	36	63	100	160									
Valve travel		20 mm						30 mm											
Actuator	Voltage	Maximum differential pressure bar																	
		PTFE	Graphite	PTFE	Graphite	PTFE	Graphite	PTFE	Graphite	PTFE	Graphite	PTFE	Graphite	PTFE	Graphite	PTFE	Graphite	PTFE	Graphite
AEL51211	230	29.7	14.8	22	10	12	4.8	10.3	4.2	2.6		1.2							
AEL51212	115	29.7	14.8	22	10	12	4.8	10.3	4.2	2.6		1.2							
AEL51213	24	29.7	14.8	22	10	12	4.8	10.3	4.2	2.6		1.2							
AEL52211	230	40		40		39	31.8	30.7	24	11.4	8.8	7.5	5.6	3.2	1.4	1.5	0.3		
AEL52212	115	40		40		39	31.8	30.7	24	11.4	8.8	7.5	5.6	3.2	1.4	1.5	0.3		
AEL52213	24	40		40		39	31.8	30.7	24	11.4	8.8	7.5	5.6	3.2	1.4	1.5	0.3		
AEL53211	230			40		40		40		33.5	30.8	23.2	21.3	12	10.2	7.1	6	4	3.3
AEL53212	115			40		40		40		33.5	30.8	23.2	21.3	12	10.2	7.1	6	4	3.3
AEL53213	24			40		40		40		33.5	30.8	23.2	21.3	12	10.2	7.1	6	4	3.3
AEL54211	230							40		40		40		24.4	22.6	15	13	8.9	8
AEL54212	115							40		40		40		24.4	22.6	15	13	8.9	8
AEL54213	24							40		40		40		24.4	22.6	15	13	8.9	8
AEL55311	230									40		40		40	40	28.7	27.5	17.4	16.7
AEL55312	115									40		40		40	40	28.7	27.5	17.4	16.7
AEL55313	24									40		40		40	40	28.7	27.5	17.4	16.7
AEL56411	230													40	40	40	40	32.9	32
AEL56412	115													40	40	40	40	32.9	32
AEL56413	24													40	40	40	40	32.9	32

with Bellows and PTFE or Graphite stem seal

Valve size		DN15	DN20	DN25	DN32	DN40	DN50	DN65	DN80	DN100									
Kv		4.0	6.3	10	16	25	36	63	100	160									
Valve travel		20 mm						30 mm											
Actuator	Voltage	Maximum differential pressure bar																	
		PTFE	Graphite	PTFE	Graphite	PTFE	Graphite	PTFE	Graphite	PTFE	Graphite	PTFE	Graphite	PTFE	Graphite	PTFE	Graphite	PTFE	Graphite
AEL52211	230	4.8		2.3															
AEL52212	115	4.8		2.3															
AEL52213	24	4.8		2.3															
AEL53211	230	40		40		40		40		19.2	16.6	12.9	11	3.9	2.1	1.8	0.7	0.6	
AEL53212	115	40		40		40		40		19.2	16.6	12.9	11	3.9	2.1	1.8	0.7	0.6	
AEL53213	24	40		40		40		40		19.2	16.6	12.9	11	3.9	2.1	1.8	0.7	0.6	
AEL54211	230							40		40		34.9	33	16.3	14.5	9.8	8.6	5.5	4.8
AEL54212	115							40		40		34.9	33	16.3	14.5	9.8	8.6	5.5	4.8
AEL54213	24							40		40		34.9	33	16.3	14.5	9.8	8.6	5.5	4.8
AEL55311	230									40		40		37.6	35.8	23.4	22.2	14.1	13.3
AEL55312	115									40		40		37.6	35.8	23.4	22.2	14.1	13.3
AEL55313	24									40		40		37.6	35.8	23.4	22.2	14.1	13.3
AEL56411	230													40		40		29.5	28.8
AEL56412	115													40		40		29.5	28.8
AEL56413	24													40		40		29.5	28.8

**Maximum differential pressures for Class VI shut off (soft-seal) -
KE, LE, KEA and LEA 2-port valves**

with PTFE or Graphite stem seal

Valve size		DN15	DN20	DN25	DN32	DN40	DN50	DN65	DN80	DN100									
Kv		4.0	6.3	10	16	25	36	63	100	160									
Valve travel		20 mm						30 mm											
Actuator	Voltage	Maximum differential pressure bar																	
		PTFE	Graphite	PTFE	Graphite	PTFE	Graphite	PTFE	Graphite	PTFE	Graphite	PTFE	Graphite	PTFE	Graphite	PTFE	Graphite	PTFE	Graphite
AEL51211	230	40	29.7	35	23.2	23	15.5	18	11.9	7.7	5.1	5.5	3.6	2.9	1.1				
AEL51212	115	40	29.7	35	23.2	23	15.5	18	11.9	7.7	5.1	5.5	3.6	2.9	1.1				
AEL51213	24	40	29.7	35	23.2	23	15.5	18	11.9	7.7	5.1	5.5	3.6	2.9	1.1				
AEL52211	230	40		40		40		38.4	32.3	16.6	13.9	11	9.9	6.4	4.6	4.1	2.9	2.5	1.8
AEL52212	115	40		40		40		38.4	32.3	16.6	13.9	11	9.9	6.4	4.6	4.1	2.9	2.5	1.8
AEL52213	24	40		40		40		38.4	32.3	16.6	13.9	11	9.9	6.4	4.6	4.1	2.9	2.5	1.8
AEL53211	230					40		40		38.6	35.9	27	25.6	15.2	13.4	9.7	8.6	6	5.3
AEL53212	115					40		40		38.6	35.9	27	25.6	15.2	13.4	9.7	8.6	6	5.3
AEL53213	24					40		40		38.6	35.9	27	25.6	15.2	13.4	9.7	8.6	6	5.3
AEL54211	230							40		40		40		27.6	25.8	17.6	16.5	11	10.2
AEL54212	115							40		40		40		27.6	25.8	17.6	16.5	11	10.2
AEL54213	24							40		40		40		27.6	25.8	17.6	16.5	11	10.2
AEL55311	230											40		40		31.3	30.1	19.5	18.8
AEL55312	115											40		40		31.3	30.1	19.5	18.8
AEL55313	24											40		40		31.3	30.1	19.5	18.8
AEL56411	230													40		40		40	
AEL56412	115													40		40		40	
AEL56413	24													40		40		40	

with Bellows PTFE or Graphite stem seal

Valve size		DN15	DN20	DN25	DN32	DN40	DN50	DN65	DN80	DN100									
Kv		4.0	6.3	10	16	25	36	63	100	160									
Valve travel		20 mm						30 mm											
Actuator	Voltage	Maximum differential pressure bar																	
		PTFE	Graphite	PTFE	Graphite	PTFE	Graphite	PTFE	Graphite	PTFE	Graphite	PTFE	Graphite	PTFE	Graphite	PTFE	Graphite	PTFE	Graphite
AEL52211	230	19.8	4.9	15.7	3.9	10.5	2.6	8.1	2	2.5	0.6								
AEL52212	115	19.8	4.9	15.7	3.9	10.5	2.6	8.1	2	2.5	0.6								
AEL52213	24	19.8	4.9	15.7	3.9	10.5	2.6	8.1	2	2.5	0.6								
AEL53211	230	40		40		40		40		25.5	22.9	18.2	16.3	7.9	6.1	5	3.9	3.1	2.4
AEL53212	115	40		40		40		40		25.5	22.9	18.2	16.3	7.9	6.1	5	3.9	3.1	2.4
AEL53213	24	40		40		40		40		25.5	22.9	18.2	16.3	7.9	6.1	5	3.9	3.1	2.4
AEL54211	230							40		40		40	38.3	20.3	18.5	13	11.8	8.1	7.3
AEL54212	115							40		40		40	38.3	20.3	18.5	13	11.8	8.1	7.3
AEL54213	24							40		40		40	38.3	20.3	18.5	13	11.8	8.1	7.3
AEL55311	230											40		40	39.7	26.5	25.4	16.5	15.8
AEL55312	115											40		40	39.7	26.5	25.4	16.5	15.8
AEL55313	24											40		40	39.7	26.5	25.4	16.5	15.8
AEL56411	230													40		40		32.1	31.3
AEL56412	115													40		40		32.1	31.3
AEL56413	24													40		40		32.1	31.3

**Maximum differential pressures for modulating duties only
JE and JEA 2-port valves**

PTFE or Graphite stem seal

Valve size		DN15	DN20	DN25	DN32	DN40	DN50	DN65	DN80	DN100									
		½"	¾"	1"	1¼"	1½"	2"	2½"	3"	4"									
Kv		4.0	6.3	10	16	25	36	63	100	160									
Actuator	Voltage	Maximum differential pressure bar																	
		PTFE	Graph	PTFE	Graph	PTFE	Graph	PTFE	Graph	PTFE	Graph	PTFE	Graph	PTFE	Graph	PTFE	Graph	PTFE	Graph
AEL51211	230	44	29	35	23	23	15.5	18.1	12.0	7.8	5.1	5.5	3.6	2.9	1.1	1.8	0.7	1.1	0.4
AEL51212	115	44	29	35	23	23	15.5	18.1	12.0	7.8	5.1	5.5	3.6	2.9	1.1	1.8	0.7	1.1	0.4
AEL51213	24	44	29	35	23	23	15.5	18.1	12.0	7.8	5.1	5.5	3.6	2.9	1.1	1.8	0.7	1.1	0.4
AEL52211	230	94	79	74	63	50	42	38	32	16.6	14.0	11.8	9.9	6.4	4.6	4.1	3.0	2.5	1.8
AEL52212	115	94	79	74	63	50	42	38	32	16.6	14.0	11.8	9.9	6.4	4.6	4.1	3.0	2.5	1.8
AEL52213	24	94	79	74	63	50	42	38	32	16.6	14.0	11.8	9.9	6.4	4.6	4.1	3.0	2.5	1.8
AEL53211	230			100	100	100	100	89	83	38.6	36.0	27.5	25.6	15.3	13.5	9.8	8.6	6.1	5.4
AEL53212	115			100	100	100	100	89	83	38.6	36.0	27.5	25.6	15.3	13.5	9.8	8.6	6.1	5.4
AEL53213	24			100	100	100	100	89	83	38.6	36.0	27.5	25.6	15.3	13.5	9.8	8.6	6.1	5.4
AEL54211	230							100	100	69	67	50	48	27.7	25.9	17.7	16.5	11.0	10.3
AEL54212	115							100	100	69	67	50	48	27.7	25.9	17.7	16.5	11.0	10.3
AEL54213	24							100	100	69	67	50	48	27.7	25.9	17.7	16.5	11.0	10.3
AEL55211	230									100	100	87	85	49	47	31.3	30.1	19.5	18.8
AEL55212	115									100	100	87	85	49	47	31.3	30.1	19.5	18.8
AEL55213	24									100	100	87	85	49	47	31.3	30.1	19.5	18.8
AEL56211	230											100	100	88	86	56.2	55.0	35.0	34.3
AEL56212	115											100	100	88	86	56.2	55.0	35.0	34.3
AEL56213	24											100	100	88	86	56.2	55.0	35.0	34.3

Maximum differential pressures for Class IV shut-off

PTFE or Graphite stem seal

Valve size		DN15	DN20	DN25	DN32	DN40	DN50	DN65	DN80	DN100									
		½"	¾"	1"	1¼"	1½"	2"	2½"	3"	4"									
Kv		4.0	6.3	10	16	25	36	63	100	160									
Actuator	Voltage	Maximum differential pressure bar																	
		PTFE	Graph	PTFE	Graph	PTFE	Graph	PTFE	Graph	PTFE	Graph	PTFE	Graph	PTFE	Graph	PTFE	Graph	PTFE	Graph
AEL52211	230	79.5	64.6	61.3	49.5	39.1	31.2	30.7	24.6	11.5	8.8	7.5	5.6	3.2	1.4	1.5	0.4	0.5	
AEL52212	115	79.5	64.6	61.3	49.5	39.1	31.2	30.7	24.6	11.5	8.8	7.5	5.6	3.2	1.4	1.5	0.4	0.5	
AEL52213	24	79.5	64.6	61.3	49.5	39.1	31.2	30.7	24.6	11.5	8.8	7.5	5.6	3.2	1.4	1.5	0.4	0.5	
AEL53211	230			100	100	100	96.9	81.6	75.5	33.5	30.9	23.2	21.3	12.1	10.2	7.2	6.0	4.0	3.3
AEL53212	115			100	100	100	96.9	81.6	75.5	33.5	30.9	23.2	21.3	12.1	10.2	7.2	6.0	4.0	3.3
AEL53213	24			100	100	100	96.9	81.6	75.5	33.5	30.9	23.2	21.3	12.1	10.2	7.2	6.0	4.0	3.3
AEL54211	230							100	100	64.4	61.7	45.2	43.3	24.4	22.6	15.1	13.9	9.0	8.2
AEL54212	115							100	100	64.4	61.7	45.2	43.3	24.4	22.6	15.1	13.9	9.0	8.2
AEL54213	24							100	100	64.4	61.7	45.2	43.3	24.4	22.6	15.1	13.9	9.0	8.2
AEL55211	230									100	100	83.0	81.1	45.7	43.8	28.7	27.5	17.4	16.7
AEL55212	115									100	100	83.0	81.1	45.7	43.8	28.7	27.5	17.4	16.7
AEL55213	24									100	100	83.0	81.1	45.7	43.8	28.7	27.5	17.4	16.7
AEL56211	230											100	100	84.6	82.8	53.6	52.4	33.0	32.2
AEL56212	115											100	100	84.6	82.8	53.6	52.4	33.0	32.2
AEL56213	24											100	100	84.6	82.8	53.6	52.4	33.0	32.2

**Maximum differential pressures for Class VI shut-off
JE and JEA 2-port valves**

PTFE or Graphite stem seal

Valve size		DN15	DN20	DN25	DN32	DN40	DN50	DN65	DN80	DN100									
		½"	¾"	1"	1¼"	1½"	2"	2½"	3"	4"									
Kv		4.0	6.3	10	16	25	36	63	100	160									
Actuator	Voltage	Maximum differential pressure bar																	
		PTFE	Graph	PTFE	Graph	PTFE	Graph	PTFE	Graph	PTFE	Graph	PTFE	Graph	PTFE	Graph	PTFE	Graph	PTFE	Graph
AEL52211	230	94.1	79.2	74.3	62.5	49.7	41.8	38.5	32.4	16.6	14.0	11.8	9.9	6.4	4.6	4.1	3.0	2.5	1.8
AEL52212	115	94.1	79.2	74.3	62.5	49.7	41.8	38.5	32.4	16.6	14.0	11.8	9.9	6.4	4.6	4.1	3.0	2.5	1.8
AEL52213	24	94.1	79.2	74.3	62.5	49.7	41.8	38.5	32.4	16.6	14.0	11.8	9.9	6.4	4.6	4.1	3.0	2.5	1.8
AEL53211	230			100	100	100	100	89.4	83.3	38.6	36.0	27.5	25.6	15.3	13.5	9.8	8.6	6.1	5.4
AEL53212	115			100	100	100	100	89.4	83.3	38.6	36.0	27.5	25.6	15.3	13.5	9.8	8.6	6.1	5.4
AEL53213	24			100	100	100	100	89.4	83.3	38.6	36.0	27.5	25.6	15.3	13.5	9.8	8.6	6.1	5.4
AEL54211	230							100	100	69.5	66.9	49.5	47.7	27.7	25.9	17.7	16.5	11.0	10.3
AEL54212	115							100	100	69.5	66.9	49.5	47.7	27.7	25.9	17.7	16.5	11.0	10.3
AEL54213	24							100	100	69.5	66.9	49.5	47.7	27.7	25.9	17.7	16.5	11.0	10.3
AEL55211	230									100	100	87.3	85.4	48.9	47.1	31.3	30.1	19.5	18.8
AEL55212	115									100	100	87.3	85.4	48.9	47.1	31.3	30.1	19.5	18.8
AEL55213	24									100	100	87.3	85.4	48.9	47.1	31.3	30.1	19.5	18.8
AEL56211	230											100	100	87.8	86.0	56.2	55.0	35.0	34.3
AEL56212	115											100	100	87.8	86.0	56.2	55.0	35.0	34.3
AEL56213	24											100	100	87.8	86.0	56.2	55.0	35.0	34.3

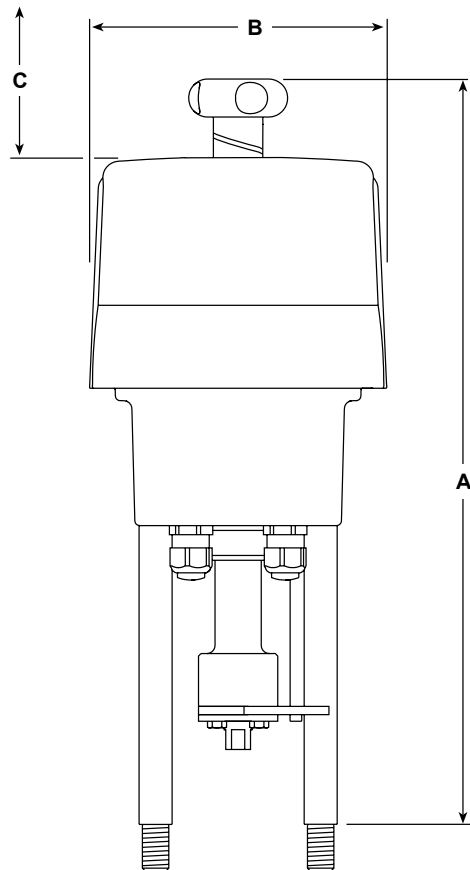
**Maximum differential pressures for modulating duties only -
QL 3-port valves**

with PTFE or Graphite stem seal

Valve size		DN15	DN20	DN25	DN32	DN40	DN50	DN65	DN80	DN100									
Kv		4.0	6.3	10	16	25	36	63	100	160									
Valve travel		20 mm						30 mm											
Actuator	Voltage	Maximum differential pressure bar																	
		PTFE	Graphite	PTFE	Graphite	PTFE	Graphite	PTFE	Graphite	PTFE	Graphite	PTFE	Graphite	PTFE	Graphite	PTFE	Graphite	PTFE	Graphite
AEL51211	230	26.6	12	26.6	12	15.3	6.4	9.2	3.7	5.6	2	3.2	1	1.1		0.4		0.1	
AEL51212	115	26.6	12	26.6	12	15.3	6.4	9.2	3.7	5.6	2	3.2	1	1.1		0.4		0.1	
AEL51213	24	26.6	12	26.6	12	15.3	6.4	9.2	3.7	5.6	2	3.2	1	1.1		0.4		0.1	
AEL52211	230	40	39.6	40	39.6	32.1	23.2	19.5	14	12.3	8.8	7.4	5.2	3.7	2.3	2.3	1.3	1.1	0.6
AEL52212	115	40	39.6	40	39.6	32.1	23.2	19.5	14	12.3	8.8	7.4	5.2	3.7	2.3	2.3	1.3	1.1	0.6
AEL52213	24	40	39.6	40	39.6	32.1	23.2	19.5	14	12.3	8.8	7.4	5.2	3.7	2.3	2.3	1.3	1.1	0.6
AEL53211	230	40		40		40		40		29.2	25.7	17.9	15.7	10.3	8.9	7	6	3.7	3.2
AEL53212	115	40		40		40		40		29.2	25.7	17.9	15.7	10.3	8.9	7	6	3.7	3.2
AEL53213	24	40		40		40		40		29.2	25.7	17.9	15.7	10.3	8.9	7	6	3.7	3.2
AEL54211	230								40	32.6	30.3	19.6	18.2	13.5	12.5	7.4	6.9		
AEL54212	115								40	32.6	30.3	19.6	18.2	13.5	12.5	7.4	6.9		
AEL54213	24								40	32.6	30.3	19.6	18.2	13.5	12.5	7.4	6.9		
AEL55311	230									40	30.2	28.8	20.9	20	11.6	11.1			
AEL55312	115									40	30.2	28.8	20.9	20	11.6	11.1			
AEL55313	24									40	30.2	28.8	20.9	20	11.6	11.1			
AEL56411	230													40		40	25.3	24.7	
AEL56412	115													40		40	25.3	24.7	
AEL56413	24													40		40	25.3	24.7	

Dimensions / weights (approximately) in mm and kg

Model	A	B	C	Weight
AEL51_	460	177	138	4.5
AEL52_	460	177	138	4.8
AEL53_	460	177	138	5.2
AEL54_	506	177	150	7.0
AEL55_	569	225	231	10.0
AEL56_	807	227	280	20.0



Safety information, installation and maintenance

For full details see the Installation and Maintenance Instructions (IM-P358-26) supplied with the product.

Installation and wiring note:

The valve should be installed in the horizontal line. The position of the actuator will depend on the type of valve to which it is fitted and the temperature of the media. However, it is not recommended that the actuators be fitted directly below the valve or in a wet environment.

Disposal

This product is recyclable. No ecological hazard is anticipated with the disposal of this product, providing due care is taken.

Selection example

Control valve	DN20 KE43 PTSUSS.2 Kv 6.3 flanged PN40
Maximum ΔP	20 bar
Electrical supply	230 Vac
Control signal	4 - 20 mA
Actuator selected	AEL51211
Positioner required	AEL5961
Valve adaptor	AEL6911
Mounting flange	EL5970

How to order

Product	A = Actuator	A
Type	E = Electric	E
Movement	L = Linear	L
Series	5	5
Thrust (kN)	1 = 1 kN	1
	2 = 2 kN	
	3 = 4.5 kN	
	4 = 8 kN	
	5 = 14 kN	
	6 = 25 kN	
Stroke (mm)	2 = 50 mm (AEL51_, AEL52_, AEL53_ and AEL54_ series only)	2
	3 = 65 mm (AEL55_ series only)	
	4 = 100 mm (AEL56_ series only)	
Maximum speed (mm/s)	1 = 0 - 1.0 mm/s	1
Supply voltage	1 = 230 Vac	1
	2 = 115 Vac	
	3 = 24 Vac	
	4 = 24 Vdc (not available for AEL56_)	
Control signal*	F = Integral 24 V VMD (only for actuators with 24 V supply voltage)	J
	G = Integral 115 V VMD (only for actuators with 115 V supply voltage)	
	J = Integral 230 V VMD (only for actuators with 230 V supply voltage)	
Failure mode	X = No mechanical/electrical fail safe device	X
Potentiometer	A = With 1 k Ω potentiometer	A
	S = Without	

* For 0/2 - 10 Vdc and 0/4 - 20 mA modulating control signal the appropriate positioner card must be ordered at time of order.

How to order example

1 off Spirax Sarco AEL51211JXA electric linear actuator for use with a DN100 SPIRA-TROL two-port KE43 control valve.