

EMICO

EA SERIES SR & DA PNEUMATIC ACTUATORS





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DESIGN

EMICO's EA Series, Aluminium Rack & Pinion, Double Acting and Spring Return Pneumatic Actuators are based on innovative and patented technology.

These actuators feature a top-mount malfunction indicator and open / close stop adjustment as standard.

State-of-the-art engineering has also enabled reduction in size without the loss of torque.

The features and characteristics of these actuators have kept pace with fourth generation pneumatic actuators around the world.

FEATURES

- **Indicator**

Visual position indicator to NAMUR standard is convenient for mounting accessories such as limit switch, positioner, etc.

- **Pinion**

The pinion is high-precision and integrative, made from nickel alloy steel and in full conformance to the latest standards of ISO5211, DIN3337 and NAMUR. Dimensions can be customised. Also available in stainless steel.

- **Actuator Body**

The extruded aluminium alloy ASTM6005 body is first hard anodized (40um thick), followed by polyester powder coating (min. 70um thick). Other coatings such as PTFE or nickel plated are available on request.

- **End Caps**

Die-cast aluminium is first hard anodized (40um thick), followed by polyester powder coating (min. 70um thick). Other coatings such as PTFE or nickel plated are available on request.

- **Pistons**

The twin-rack pistons are made from die-cast hard-anodised aluminium. They have symmetric mounting position, long life cycle and fast operation. Rotation may be reversed by simply inverting the pistons.

- **Travel Adjustment**

Two independent, external travel-stop adjustment bolts allow precise and easy adjustments to $\pm 5^\circ$ in both open and close positions.

- **High Performance Springs**

Pre-loaded, coated stainless steel springs are corrosion-resistant and offer longer cycle life. They can be dis-assembled safely and conveniently. Different torque requirements can be accommodated by changing the number of springs.

- **Bearings & Guides**

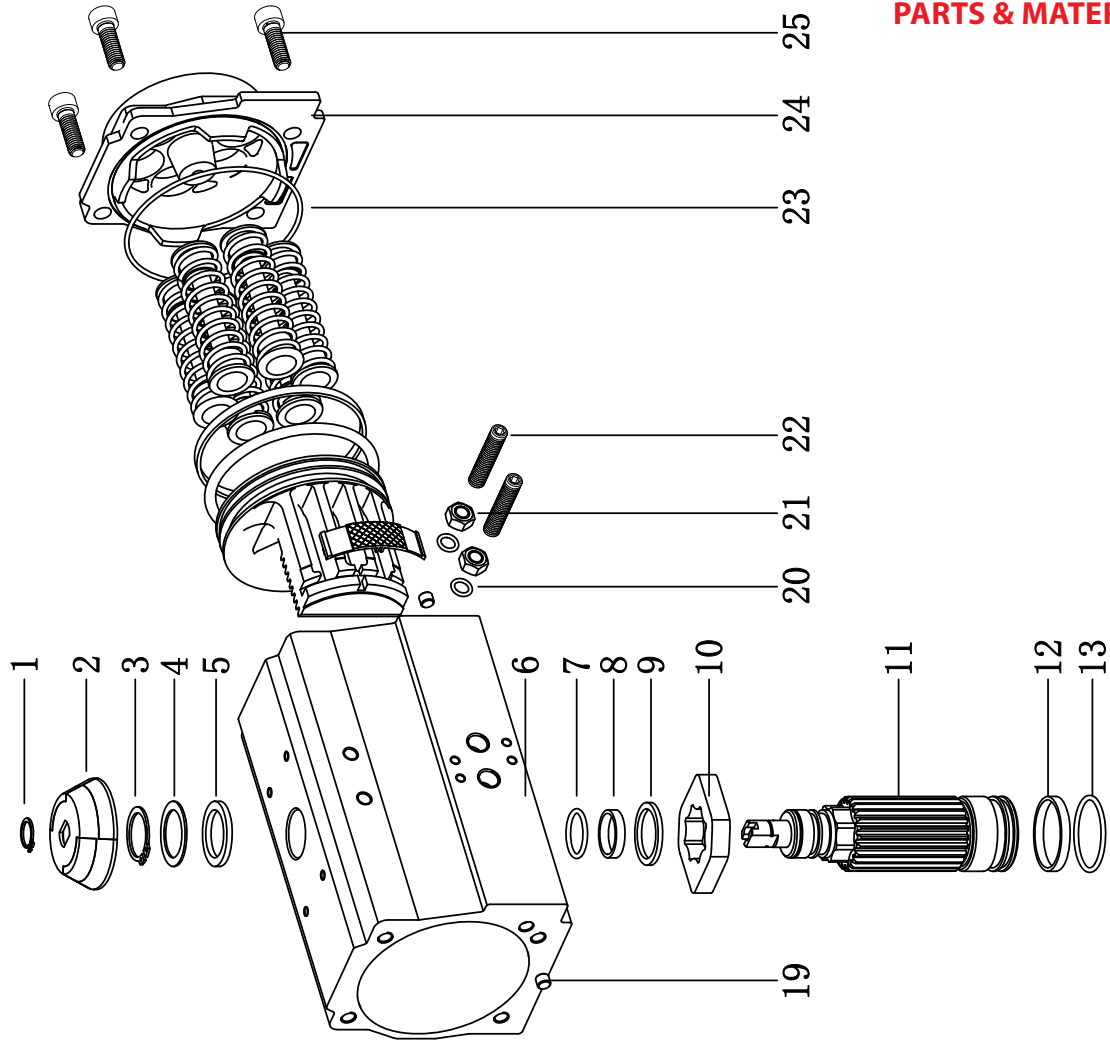
These are made from low-friction, long-life engineered plastic material to avoid direct contact between metals and assist with smooth operation. Maintenance and replacement is easy and convenient.

- **O-Rings**

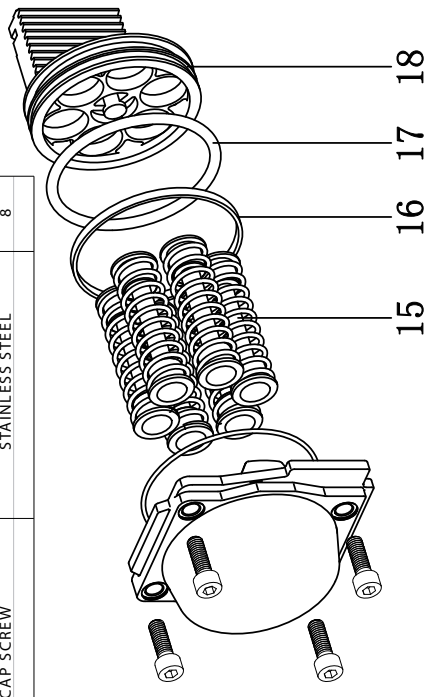
NBR rubber O-Rings provide trouble-free operation at standard temperature ranges. Viton or Silicone is used for lower or higher temperatures.



PARTS & MATERIAL



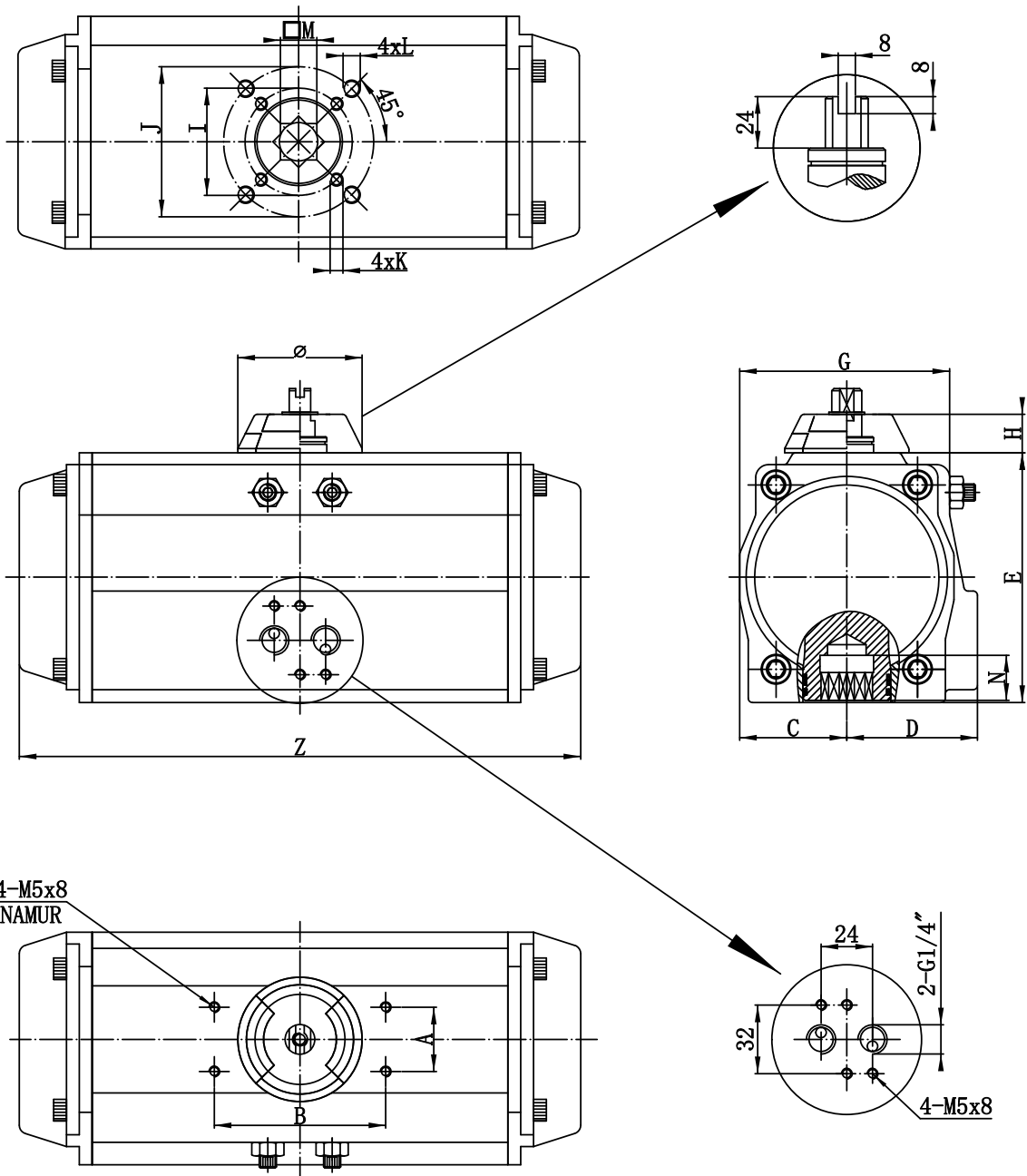
NO.	PART	MATERIAL	QTY
1	CIRCLIP	STAINLESS STEEL	1
2	INDICATOR	PLASTIC	1
3	CIRCLIP	STAINLESS STEEL	1
4	THRUST WASHER	STAINLESS STEEL	1
5	OUTSIDE WASHER	POLYOXYMETHYLENE	1
6	BODY	EXTRUDED ALUMINIUM ALLOY	1
7	O-RING (PINION TOP)	NBR	1
8	BEARING (PINION TOP)	POLYOXYMETHYLENE	1
9	INSIDE WASHER	POLYOXYMETHYLENE	1
10	CAM	EXTRUDED LOW CARBON ALLOY STEEL	1
11	PINION	EXTRUDED LOW CARBON ALLOY STEEL	1
12	BEARING (PINION BOTTOM)	POLYOXYMETHYLENE	1
13	O-RING (PINION BOTTOM)	NBR	1
14	GUIDE(PISTON)	NYLON66+30% GLASS FIBER	2
15	SPRING	PIANO SPRING STEEL	0-12
16	BEARING (PISTON)	POLYOXYMETHYLENE	2
17	O-RING (PISTON)	NBR	2
18	PISTON	CAST ALUMINIUM	2
19	PLUG	NBR	2
20	O-RING(ADJUST SCREW)	NBR	2
21	ADJUST SCREW	STAINLESS STEEL	2
22	NUT (ADJUST SCREW)	STAINLESS STEEL	2
23	O-RING (END CAP)	NBR	2
24	END CAP	CAST ALUMINIUM	2
25	CAP SCREW	STAINLESS STEEL	8



EMICO EA SERIES SR & DA PNEUMATIC ACTUATOR

DIMENSIONAL DRAWINGS

40~210

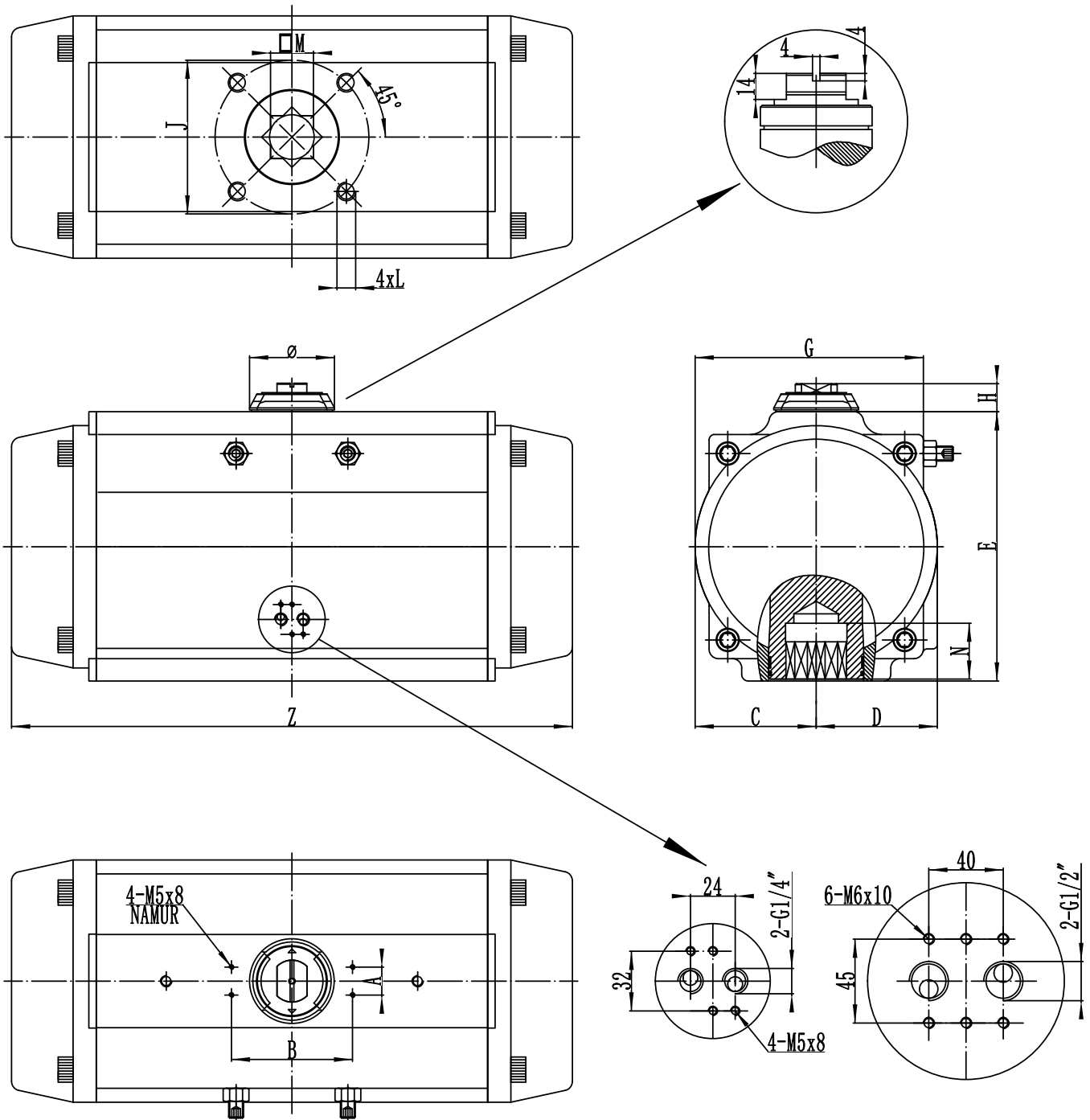


Unit: mm

Model	A	B	C	D	E	G	H	I	J	K	L	M	N	Z	Ø	Air connection
EA-40	30	80	28.5	36.5	60	52	30	Φ36	Φ50	M5x8	M6x10	11	14	122	40	G1/4"(1/4"NPT)
EA-52	30	80	30	41.5	72	65	30	Φ36	Φ50	M5x8	M6x10	11	14	147	40	G1/4"(1/4"NPT)
EA-63	30	80	36	47	87.5	72	30	Φ50	Φ70	M6x10	M8x13	14	18	168	40	G1/4"(1/4"NPT)
EA-75	30	80	42	53	99.5	81	30	Φ50	Φ70	M6x10	M8x13	14	18	185	40	G1/4"(1/4"NPT)
EA-83	30	80	46	57	108.8	88	30	Φ50	Φ70	M6x10	M8x13	17	21	211	40	G1/4"(1/4"NPT)
EA-92	30	80	50	61	116.5	98	30	Φ50	Φ70	M6x10	M8x13	17	21	262	40	G1/4"(1/4"NPT)
EA-105	30	80	57.5	64	133	109.5	30	Φ70	Φ102	M8x13	M10x16	22	26	269	40	G1/4"(1/4"NPT)
EA-125	30	80	67.5	74.5	155	127.5	30	Φ70	Φ102	M8x13	M10x16	22	26	303	55	G1/4"(1/4"NPT)
EA-140	30	80	75	77	172	137.5	30	Φ102	Φ125	M10x16	M12x20	27	31	394	55	G1/4"(1/4"NPT)
EA-160	30	80	87	87	197	158	30	Φ102	Φ125	M10x16	M12x20	27	31	452	55	G1/4"(1/4"NPT)
EA-190	30	130	103	103	230	189	30		Φ140		M16x25	36	40	528	80	G1/4"(1/4"NPT)
EA-210	30	130	114	114	255	211	30		Φ140		M16x25	36	40	532	80	G1/4"(1/4"NPT)

DIMENSIONAL DRAWINGS

240~270

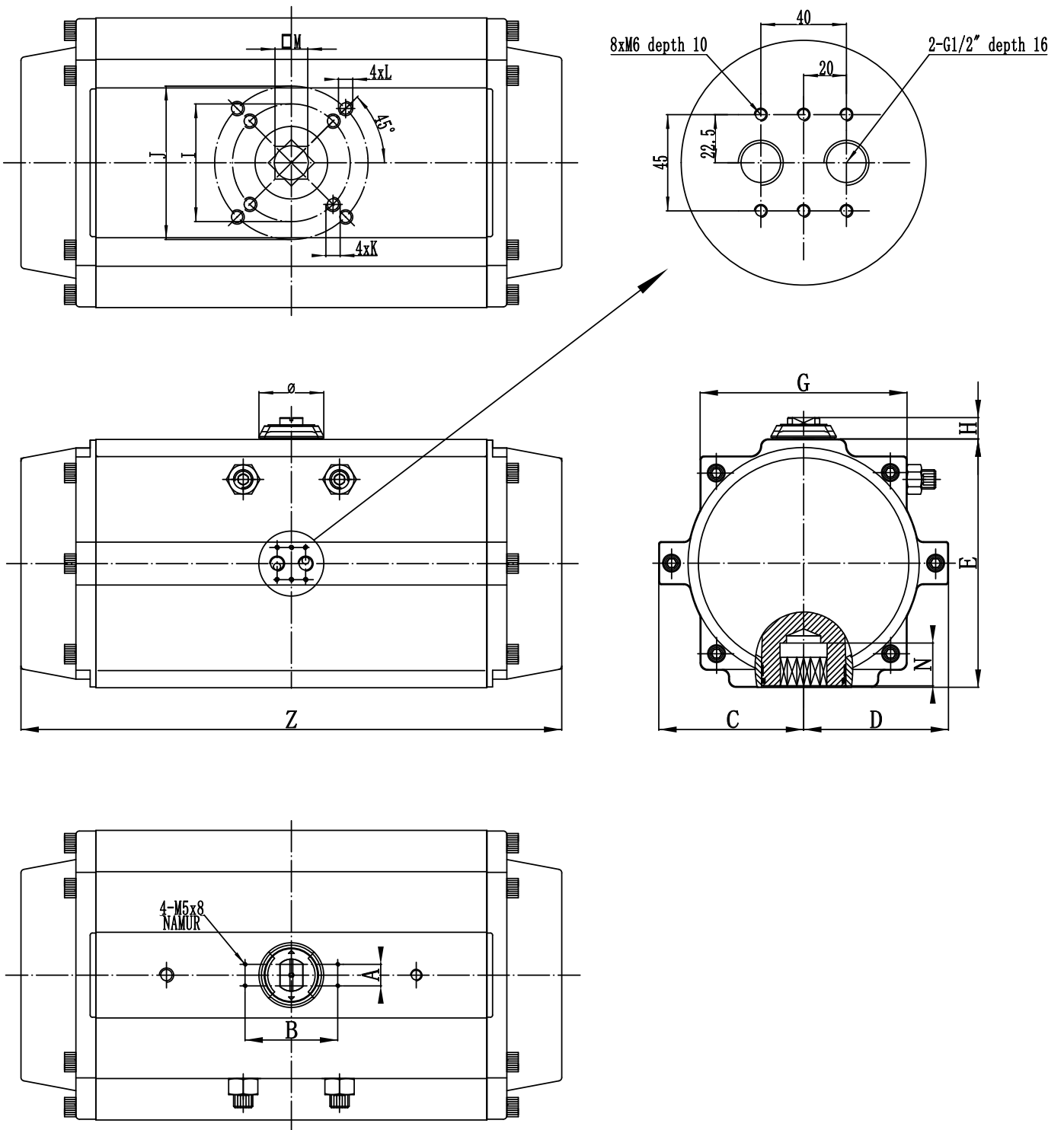


Unit: mm

Model	A	B	C	D	E	G	H	I	J	K	L	M	N	Z	Ø	Air connection
EA-240	30	130	130	130	289	245	30		Φ165		M20x25	46	50	602	80	G1/4"(1/4"NPT)
EA-270	30	130	147	147	326	273	30		Φ165		M20x25	46	50	722	80	G1/2"(1/2"NPT)

DIMENSIONAL DRAWINGS

300~350



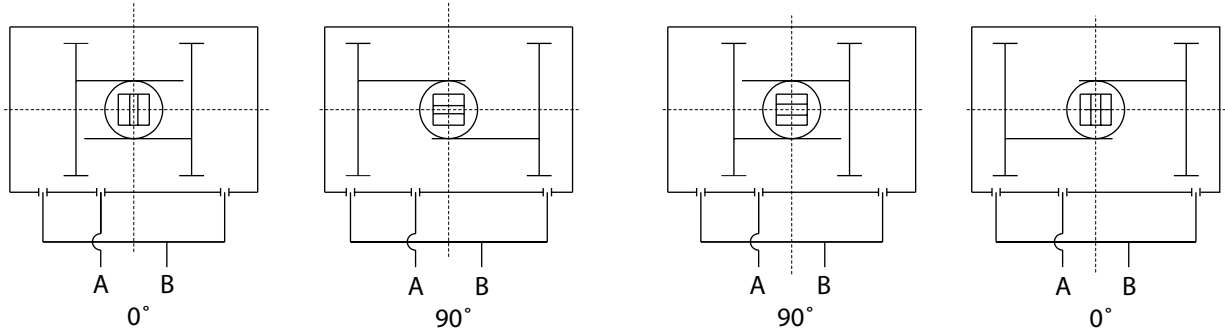
Unit: mm

Model	A	B	C	D	E	G	H	I	J	K	L	M	N	Z	ø	Air connection
EA-300	30	130	203	203	348	290	30	Φ165	Φ215	M20x25	M20x25	46	60	758	80	G1/2"(1/2"NPT)
EA-350	30	130	230	230	408	336	30	Φ165	Φ254	M20x25	M16x25	46	60	888	80	G1/2"(1/2"NPT)

OPERATING PRINCIPLES

Pneumatic actuators are available in two versions - double acting and single acting (spring return).

DOUBLE ACTING



Standard Rotation

(Actuator closed with valve closed):

Air to port A forces pistons outwards, causing the pinion to turn counterclockwise while air is being exhausted from port B.

Air to port B forces pistons inwards, causing pinion to turn clockwise while air is being exhausted from port A.

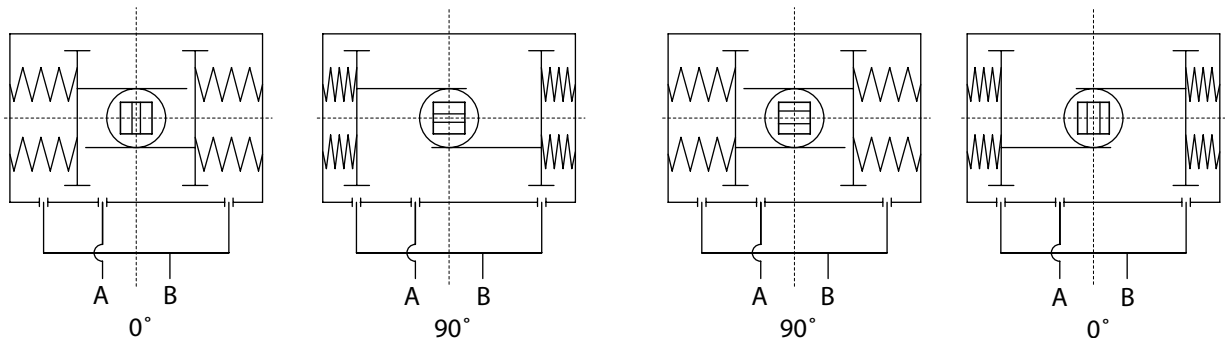
Reverse Rotation

(Actuator closed with valve open):

Air to port A forces pistons outwards, causing the pinion to turn clockwise while air is being exhausted from port B.

Air to port B forces pistons inwards, causing pinion to turn counterclockwise while air is being exhausted from port A.

SPRING RETURN



Standard Rotation

(Actuator closed with valve closed):

Air to port A forces pistons outwards, causing springs to compress. The pinion turns counterclockwise while air is being exhausted from port B.

With loss of air pressure on port A, the stored energy in the springs forces pistons inwards. The pinion turns clockwise while air is being exhausted from port A.

Reverse Rotation

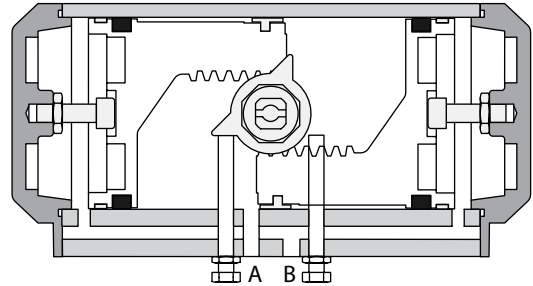
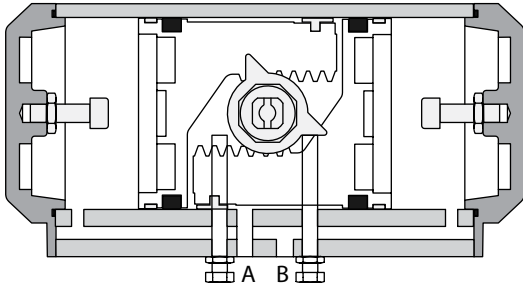
(Actuator closed with valve open):

Air to port A forces pistons outwards, causing springs to compress. The pinion turns clockwise while air is being exhausted from port B.

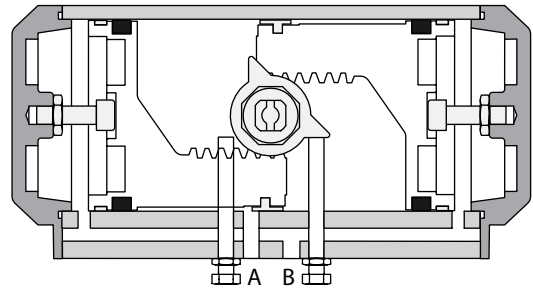
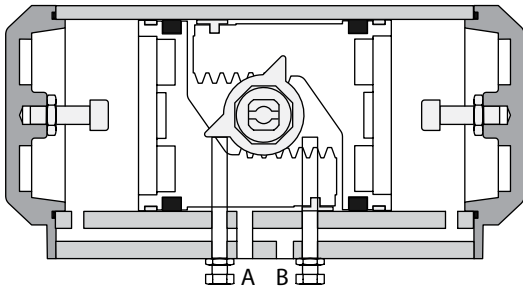
With loss of air pressure on port A, the stored energy in the springs forces pistons inwards. The pinion turns counterclockwise while air is being exhausted from port A.

LIMIT STOP ADJUSTMENT

STANDARD ROTATION (R-Closed)



REVERSE ROTATION (R-Closed)

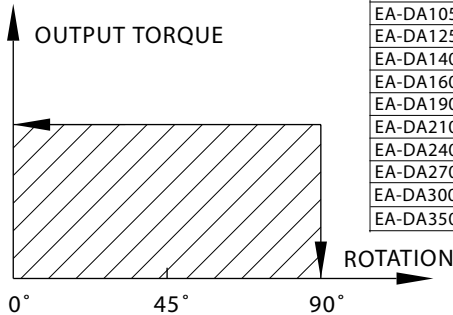


Limit Stop bolt adjustment is the same for both standard and reverse rotation.
The right bolt is for the valve closed position adjustment at 0° with $\pm 5^\circ$.
The left bolt is for the valve open position adjustment at 90° with $\pm 5^\circ$.

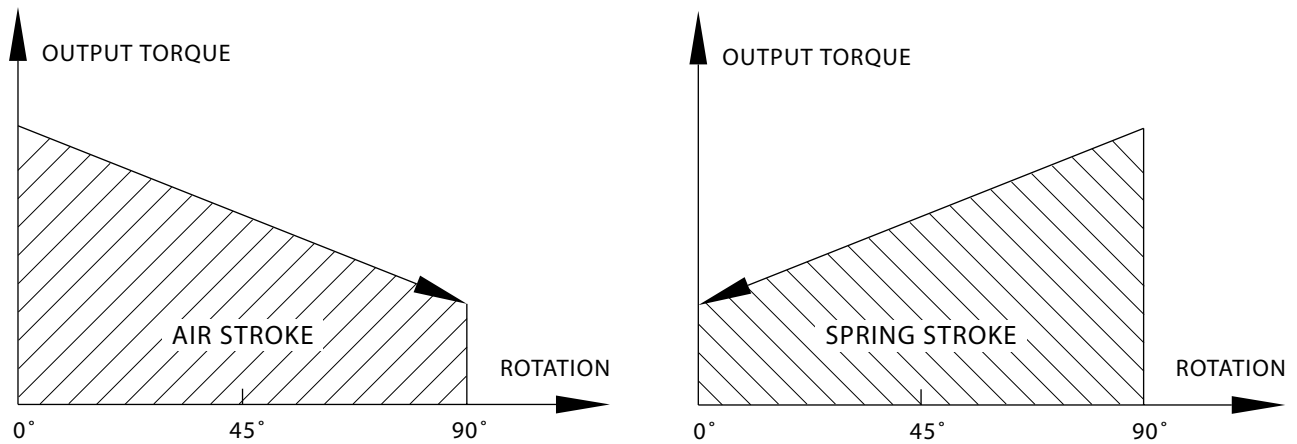
OUTPUT TORQUE FOR DOUBLE ACTING ACTUATORS

Unit: Nm

Model	Air Pressure (Bar)									
	2	2.5	3	4	4.5	5	5.5	6	7	8
EA-DA40	4.8	6.0	7.2	9.5	10.7	11.9	13.1	14.31	16.71	19.1
EA-DA52	8.0	10.0	12.0	16.0	18.0	20.0	21.9	23.9	27.9	31.9
EA-DA63	14.6	18.2	21.9	29.2	32.8	36.5	40.1	43.8	51.1	58.4
EA-DA75	20.1	25.1	30.1	40.1	45.1	50.2	55.2	60.2	70.2	80.3
EA-DA83	31.4	39.2	47.0	62.7	70.5	78.4	86.2	94.1	109.7	125.4
EA-DA92	45.1	56.4	67.7	90.3	101.6	112.9	124.1	135.4	158.0	180.6
EA-DA105	66.1	82.7	99.2	132.2	148.8	165.3	181.8	198.4	231.4	264.5
EA-DA125	100.3	125.4	150.5	200.6	225.7	250.8	275.9	301.0	351.1	401.3
EA-DA140	171.0	213.8	256.5	342.0	384.8	427.5	470.3	513.0	598.5	684.0
EA-DA160	266.0	332.5	399.0	532.0	598.5	665.0	731.5	798.0	931.0	1064.0
EA-DA190	425.6	532.0	638.4	851.2	957.6	1064.0	1170.4	1276.8	1489.6	1702.4
EA-DA210	532.0	665.0	798.0	1064.0	1197.0	1330.0	1463.0	1596.0	1862.0	2128.0
EA-DA240	769.5	961.9	1154.3	1539.0	1731.4	1923.8	2116.1	2308.5	2693.3	3078.0
EA-DA270	1169.6	1462.1	1754.5	2339.3	2631.7	2924.1	3216.5	3508.9	4093.7	4678.6
EA-DA300	1526.0	1908.0	2289.0	3052.0	3434.0	3815.0	4197.0	4578.0	5341.0	6104.0
EA-DA350	2285.0	2856.0	3427.0	4570.0	5141.0	5712.0	6283.0	6854.0	7997.0	9139.0



OUTPUT TORQUE FOR SPRING RETURN ACTUATORS



Unit: N·m

Model	Spring Qty	Air Pressure (Bar)														Spring Output		
		2.5		3		4		5		6		7		8		90°	0°	
		0° Start	90° End	0° Start	90° End	0° Start	90° End	0° Start	90° End	0° Start	90° End	0° Start	90° End	0° Start	90° End	90° Start	0° End	
EA-SR52	5	5.7	3.8	7.6	5.7												6.2	4.3
	6	4.9	2.5	6.9	4.5	10.9	8.5										7.4	5.0
	7	4.0	1.3	6.0	3.3	9.8	7.3	14.0	10.4								8.6	5.9
	8			5.2	2.0	9.2	6.0	13.2	9.1	17.2	14.1						9.9	6.7
	9			4.3	0.8	8.3	4.8	12.3	7.9	16.3	12.8	20.3	16.8				11.1	7.6
	10					7.4	3.6	11.5	6.7	15.5	11.6	19.5	15.6				12.4	8.5
	11					6.6	2.3	10.6	5.4	14.6	10.4	18.6	14.3	22.6	18.3		13.6	9.3
EA-SR63	5	11.4	7.7	15.0	11.4	22.3	14.9										10.4	6.8
	6	10.1	5.7	13.6	9.3	20.9	16.6	28.3	23.9								12.5	8.2
	7	8.6	3.6	12.5	7.2	19.5	14.5	26.8	21.9								14.6	9.6
	8			10.9	5.1	18.2	12.4	25.5	19.8	32.8	27.0	40.1	34.3				16.7	10.9
	9					16.8	10.4	24.1	17.7	31.4	24.9	38.7	32.2				18.8	12.3
	10					1.4	8.2	22.8	15.6	30.0	22.8	37.3	30.1	44.7	37.4		20.9	13.7
	11							21.5	13.5	28.7	20.7	36.0	28.0	43.3	35.3	22.9	15.0	
EA-SR75	5	14.4	10.6	19.4	15.5	29.5	25.7										14.5	10.5
	6	12.4	7.6	17.3	12.6	27.4	22.7	37.5	32.8								17.4	12.7
	7	10.4	4.8	15.2	9.7	25.3	19.9	35.4	29.9								20.3	14.8
	8			13.1	6.8	23.1	16.9	33.3	27.0	43.2	37.0	53.3	47.0				23.2	16.9
	9					21.0	14.1	31.2	24.1	41.1	34.1	51.2	44.2				26.1	19.0
	10					19.0	11.1	28.8	21.2	39.0	31.2	49.1	41.2	59.1	51.2		29.0	21.1
	11							27.0	18.3	37.0	28.3	47.0	38.4	57.0	48.4	31.9	23.2	
EA-SR83	5	23.3	16.1	31.1	24.0	46.8	39.7										23.0	15.8
	6	20.1	11.5	28.0	19.3	43.7	35.1	59.4	50.7								27.6	19.0
	7	17.0	6.9	24.8	14.8	40.5	30.5	56.2	46.2								32.2	22.1
	8			21.7	10.1	37.4	25.8	53.1	41.5	68.8	57.2	84.5	72.9				36.8	25.3
	9					34.2	21.3	49.9	37.0	65.6	52.6	81.2	68.3				41.4	28.5
	10					31.0	16.6	46.7	32.3	62.4	48.0	78.1	63.7	93.8	79.3	46.0	31.6	
	11							43.6	27.7	59.3	43.4	75.0	59.1	90.6	74.8	50.6	34.8	
EA-SR92	5	33.1	22.0	44.2	33.2	66.8	55.9										34.4	23.3
	6	28.4	15.2	39.6	26.4	62.2	49.0	84.8	71.6								41.2	28.0
	7	23.8	8.2	34.9	19.4	57.5	42.1	80.2	64.7								48.1	32.7
	8			31.3	12.6	52.9	35.2	75.5	57.9	98.1	80.5	120.7	103.0				55.0	37.3
	9					48.2	28.4	70.9	51.0	93.5	73.6	116.0	96.1				61.9	42.0
	10					43.6	21.5	66.2	44.1	88.8	66.7	111.3	89.2	134.0	111.8	68.7	46.7	
	11							61.5	37.2	84.1	59.9	106.6	82.4	129.2	105.0	75.6	51.4	
EA-SR105	5	51.0	33.4	67.5	49.9	100.6	83.0										49.2	31.6
	6	44.7	23.5	61.1	40.0	94.2	73.2	127.3	106.2								59.1	38.0
	7	38.4	13.7	54.9	30.3	87.9	63.4	121.0	96.4								68.9	44.3
	8			48.5	20.4	81.6	53.5	114.7	86.5	147.7	119.6	180.8	152.7				78.7	50.6
	9					75.3	43.7	108.4	76.8	141.5	109.8	174.5	142.9				88.6	56.9
	10					68.9	33.4	102.0	66.5	135.1	99.6	168.2	132.6	201.2	165.7	98.4	63.3	
	11							95.7	57.0	128.7	90.1	161.8	123.1	194.8	156.2	108.3	69.6	
12							89.4	47.5	122.5	80.6	155.5	113.6	188.6	146.7	118.1	75.9		

Model	Spring Qty	Air Pressure (Bar)														Spring Output	
		2.5		3		4		5		6		7		8		90°	0°
		0° Start	90° End	0° Start	90° End	0° Start	90° End	0° Start	90° End	0° Start	90° End	0° Start	90° End	0° Start	90° End	Start	End
EA-SR125	5	73	47	98	72	148	122									79	52
	6	63	31	88	56	138	107	188	157							94	63
	7	52	15	77	40	127	90	178	141							110	73
	8			67	25	117	75	167	125	217	176	268	226			125	84
	9					107	59	157	109	207	159	257	210			141	94
	10					96	44	146	94	196	144	247	194	297	245	157	105
	11							136	78	186	128	236	178	286	228	173	115
	12							125	63	176	113	226	163	276	213	188	125
EA-SR140	5	128	85	171	127	256	213									129	86
	6	111	59	154	102	239	187	325	273							155	103
	7	94	33	137	76	222	162	308	247							181	120
	8			120	50	205	136	291	221	376	307	462	392			206	137
	9					187	110	273	196	358	281	444	367			232	155
	10					170	84	256	169	341	255	427	340	512	426	258	172
	11							238	143	324	229	409	314	495	400	284	189
	12							221	118	307	203	392	289	478	374	310	206
EA-SR160	5	193	124	259	191	392	324									208	140
	6	165	83	232	149	365	282	498	415							250	168
	7	137	41	203	107	336	240	469	373							292	196
	8			176	66	309	199	442	237	575	465	708	598			333	223
	9					280	157	413	290	546	423	679	556			375	251
	10					253	115	386	248	519	381	652	514	785	647	417	279
	11							358	207	491	340	624	473	757	606	458	307
	12							330	165	463	298	596	431	729	564	500	335
EA-SR190	5	332	222	438	329	651	542									309	200
	6	292	161	398	267	611	480	824	693							371	240
	7	252	99	358	205	571	418	784	631							433	280
	8			318	143	531	356	744	569	957	782	1169	995			495	320
	9					491	295	704	507	917	720	1130	933			557	360
	10					451	233	664	446	877	658	1090	871	1302	1084	618	400
	11							624	384	837	597	1050	809	1263	1022	680	440
	12							584	322	797	535	1010	748	1223	960	742	480
EA-SR210	5	390	285	523	418	789	684									380	275
	6	335	209	468	342	734	608	1000	874							456	330
	7	280	133	413	266	679	532	945	798							532	385
	8			358	190	624	456	890	722	1156	988	1422	1254			608	440
	9					569	380	835	646	1101	912	1367	1178			684	495
	10					514	304	780	570	1046	836	1312	1102	1578	1368	760	550
	11							725	494	991	760	1257	1026	1523	1292	836	605
	12							670	418	936	684	1202	950	1468	1216	912	660
EA-SR240	5	552	409	744	600	1129	985									554	410
	6	470	297	662	489	1047	874	1432	1259							665	492
	7	388	187	580	379	964	764	1349	1149							775	575
	8			498	268	883	653	1267	1037	1652	1422	2037	1807			886	656
	9					800	542	1185	926	1569	1311	1954	1696			998	739
	10					718	431	1103	816	1488	1201	1872	1586	2257	1970	1108	821
	11							1021	705	1406	1090	1791	1474	2176	1859	1219	903
	12							939	594	1323	979	1708	1363	2093	1748	1330	985
EA-SR270	5	903	675	1195	968	1779	1552									787	560
	6	790	519	1083	811	1667	1396	2252	1981							943	672
	7	679	361	972	654	1556	1238	2141	1823							1101	783
	8			860	497	1444	1081	2029	1666	2614	2252	3199	2836			1258	895
	9					1332	923	1917	1509	2502	2094	3087	2678			1416	1007
	10					1220	767	1805	1352	2390	1937	2974	2521	3560	3107	1572	1119
	11							1693	1194	2278	1779	2862	2364	3448	2949	1730	1231
	12							1582	1037	2167	1623	2751	2207	3336	2792	1887	1342
EA-SR300	5	1097	729													1061	730
	6	935	494	1316	875											1273	876
	7	772	258	1153	639	1916	1402									1485	1022
	8			991	403	1754	1166	2517	1929							1697	1168
	9					1332	923	2335	1693	3118	2456					1909	1314
	10					1220	767	2193	1458	2956	2221	3719	2984	4482	3747	2122	1460
	11							2030	1222	2793	1985	3556	2748	4319	3511	2334	1606
	12							1868	986	2631	1749	3394	2512	4157	3275	2546	1752
EA-SR350	5	1153	964													1702	1173
	6	1292	586	1863	1157											2043	1408
	7	1031	208	1602	779	2745	1922									2383	1640
	8			1341	401	2484	1544	3626	2686							2724	1877
	9					2224	1165	3366	2307	4508	3449					3064	2112
	10					1963	787	3105	1929	4247	3071	5390	4214	6532	5356	3405	2346
	11							2844	1551	3986	2693	5129	3836	6271	4978	3745	2581
	12							2584	1172	3726	2314	4869	3457	6011	4599	4086	2816

AIR CONSUMPTION

Unit: L

Model	Air Volume Opening	Air Volume Closing	Model	Air Volume Opening	Air Volume Closing
EA-40	0.06	0.07	EA-140	2.46	3.33
EA-52	0.12	0.15	EA-160	3.83	5.01
EA-63	0.20	0.24	EA-190	6.20	8.15
EA-75	0.30	0.38	EA-210	7.41	10.20
EA-83	0.45	0.54	EA-240	11.09	9.00
EA-92	0.64	0.91	EA-270	17.00	14.41
EA-105	0.95	1.20	EA-300	22.94	28.19
EA-125	1.48	1.89	EA-350	33.22	46.08

Air consumption is calculated from Air Supply, Air Volume and Action Cycle Times, as follows:

$$L / \text{Min} = \frac{\text{Air Volume (Air Volume Opening + Air Volume Closing)}}{\text{Action Cycle Times (/ min)}} \times \left[\frac{[\text{Air Supply (Kpa)} + 101.3]}{101.3} \right] \times$$

WEIGHT

Unit:Kg

Model	EA-40	EA-52	EA-63	EA-75	EA-83	EA-92	EA-105	EA-125	EA-140	EA-160	EA-190	EA-210	EA-240	EA-270	EA-300	EA-350
DA	1.0	1.4	2.0	2.7	3.1	4.6	6.8	8.9	13.3	20.0	31.0	40.0	55.5	83.8	128.5	210.2
SR		1.5	2.1	2.9	3.6	5.2	6.9	10.1	15.5	23.0	35.0	49.0	69.3	106.6	156.1	259.4

MANUAL TO ACTUATOR OPERATION

1. Remove handle and other parts, eg. circlip from valve stem, valve travel stop plate, from manual valve.
2. If actuator is to be mounted "fail close", turn valve stem 90° using handle. If "fail open", then leave as is.
3. Fit mounting kit and adapter and bolt up.
4. Assemble actuator to mounting kit.
5. Test assembled package for open/close operation using compressed air to actuator port.
6. Do not insert your hands inside the valve.
7. We suggest ensuring clean air supply pipes, especially when the plant is without an air filtration system.
8. A spacer between the actuator and valve will be necessary with fluids at high temperature.

OPERATING CONDITIONS

Operating Media

Dry or lubricated air or non-corrosive gas. Maximum particle size should be less than 30um.

Air Supply Pressure

Minimum supply pressure is 2 Bar. Maximum supply pressure is 10 Bar.

Operating Temperature

Standard (NBR O-Ring): -20°C~+80°C.

Low Temperature (Silicone O-Ring): -35°C~+80°C.

High Temperature (Viton O-Ring): -15°C~+150°C.

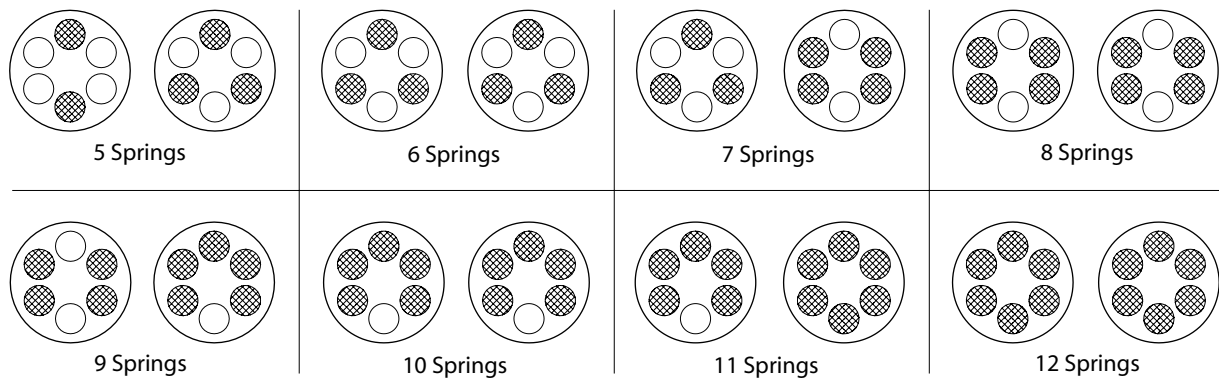
Travel Adjustment

Adjustment range of ±5° for 0° and 90° rotation.

Application

Indoor and outdoor.

SPRING PACKS FOR SPRING RETURN ACTUATORS



MAINTENANCE

- It is recommended that periodic checks be carried out to ensure that all fasteners remain tight.
- The actuator is supplied ready-lubricated with no further lubrication required. If lubrication is deemed necessary, use EP-1 grease or local equivalent.
- Under certain working conditions (heavy duty, non-compatible operating media or abnormal working conditions), it is recommended that internal seals be checked periodically and replaced when necessary.
- On spring return actuators, spring fatigue may set in, requiring replacement. Springs should always be replaced in full sets.

NOTE:

Under normal working conditions, the actuators will be maintenance-free as it has been lubricated to last a normal working life. Should it become necessary to replace seals, please contact us for assistance. Kits and Instructions are available to customers on request.

ACCESSORIES



EMICO ALS-200 Series Mini Type Limit Switch Box

- Weather Protection IP67.
- ISO5211 Bracket. Carbon Steel and Stainless Steel available.
- Mechanical Switches, Proximity Sensors, etc.

EMICO ALS-300 Series Multi-Function Type Limit Switch Box

- Weather Protection IP67.
- ISO5211 Bracket. Carbon Steel and Stainless Steel available.
 - Mechanical Switches, Proximity Sensors, etc.
 - Position Transmitter (4-20mA) available.





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