



Operating Conditions

1. Operating media

Dry or lubricated air, or the non-corrosive gas.

The maximum particle diameter must less than 30um.

2. Air supply pressure

The minimum supply pressure is 2 Bar

The maximum supply pressure is 8 Bar

3. Operating temperature

Standard temperature (NBR O-ring) : -20°C ~ +80°C

High temperature (Viton O-ring) : -15°C ~ +150°C

Low temperature (LNBR O-ring) : -35°C ~ +80°C

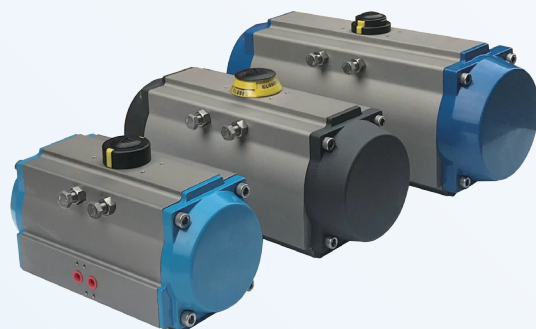
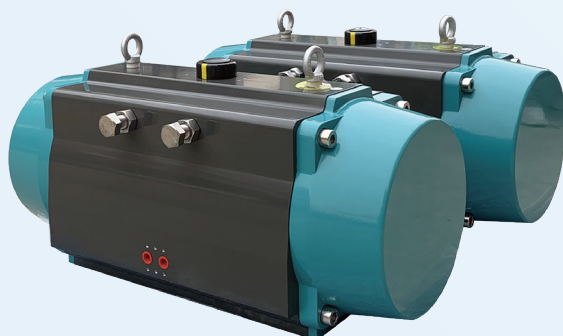
* Cold temperature (LNBR-P O-ring) : -50°C ~ +80°C

* Cold temperature (P-Silicone O-ring) : -60°C ~ +80°C

* For spring return actuators used in cold temperature ambient, springs suitable for cold temperature conditions must be configured.

4. Application

Suitable both for indoor and outdoor



Air Consumption

Air volume opening & closing

Unit: L

Model	Air volume opening	Air volume closing	Model	Air volume opening	Air volume closing
C-40	0.06	0.07	C-160	3.81	4.91
C-52	0.12	0.15	C-190	6.15	7.85
C-63	0.21	0.23	C-210	7.53	9.94
C-75	0.30	0.37	C-240	11.09	14.41
C-83	0.42	0.54	C-270	16.61	22.09
C-92	0.64	0.90	C-300	22.94	28.19
C-105	0.95	1.19	C-350	33.22	46.08
C-125	1.49	1.84	C-400	50.11	66.97
C-140	2.47	3.16			

Air consumption depends on Air Supply. Air volume and Action cycle times, the calculating as follows:

$$L/Min = \text{Air volume (Air volume Opening + Air volume closing)} \times \left[\frac{\text{Air Supply (Kpa)} + 101.3}{101.3} \right] \times \text{Action cycle times (}/min)$$

Technical Data

Weight

Unit: Kg

Model	C-40	C-52	C-63	C-75	C-83	C-92	C-105	C-125	C-140	C-160	C-190	C-210	C-240	C-270	C-300	C-350	C-400
DA	0.86	1.32	2.02	2.67	3.22	4.59	5.89	9.13	13.33	19.88	32.75	39.40	55.45	83.80	128.50	210.15	209
SR		1.47	2.17	2.97	3.62	5.34	6.74	10.53	15.83	23.78	39.35	49.00	69.25	106.60	156.10	259.35	252

Operation Time

Unit: s

Double Acting				Spring Return													
Size	0°-90°	90°-0°	Size	Spring Qty.													
				3+3		3+4		4+4		4+5		5+5		5+6		6+6	
				0°-90°	90°-0°	0°-90°	90°-0°	0°-90°	90°-0°	0°-90°	90°-0°	0°-90°	90°-0°	0°-90°	90°-0°	0°-90°	90°-0°
40DA	0.2	0.2	40SR	-	-	-	-	-	-	-	-	-	-	-	-	-	-
52DA	0.2	0.2	52SR	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.4	0.2	0.5	0.2
63DA	0.2	0.2	63SR	0.3	0.4	0.3	0.4	0.3	0.4	0.3	0.3	0.4	0.3	0.5	0.3	0.6	0.3
75DA	0.3	0.3	75SR	0.3	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.5	0.3	0.6	0.3
83DA	0.4	0.4	83SR	0.6	0.7	0.7	0.6	0.7	0.6	0.7	0.5	0.7	0.5	0.8	0.5	0.9	0.4
92DA	0.6	0.6	92SR	0.6	0.8	0.7	0.7	0.8	0.7	0.8	0.6	0.8	0.6	0.9	0.6	1.0	0.5
105DA	0.8	0.8	105SR	1.0	1.4	1.2	1.3	1.4	1.2	1.6	1.1	1.8	1.0	2.0	0.9	2.2	0.9
125DA	1.2	1.2	125SR	1.4	1.6	1.6	1.5	1.8	1.4	2.0	1.3	2.2	1.2	2.3	1.1	2.6	1.1
140DA	1.6	1.6	140SR	2.1	2.7	2.5	2.4	2.9	2.1	3.3	1.9	3.7	1.7	4.1	1.6	4.5	1.5
160DA	2.9	2.9	160SR	3.3	3.8	3.7	3.5	4.3	3.2	4.6	3.0	5.1	2.8	5.3	2.7	6.0	2.5
190DA	5.0	5.2	190SR	5.3	7.0	6.0	7.0	6.5	7.0	7.3	6.6	8.2	6.3	8.7	6.0	9.2	5.6
210DA	6.0	5.5	210SR	8.0	10.0	8.5	9.7	9.0	9.4	9.5	9.1	10.0	8.9	10.5	8.6	11.0	8.2
240DA	8.5	8.5	240SR	15.0	13.0	15.5	12.6	16.0	12.2	16.5	11.8	17.0	11.4	17.5	11.0	19.0	10.6
270DA	11.0	11.0	270SR	20.0	17.0	21.0	16.0	22.0	15.0	23.0	14.0	24.0	13.0	25.0	12.0	26.0	11.0
300DA	14.0	14.9	300SR	27.0	25.0	26.0	24.0	25.0	23.0	23.5	22.0	22.0	21.0	20.5	20.0	27.0	19.0
350DA	25.0	25.0	350SR	31.0	29.0	32.5	28.0	34.0	27.0	35.5	26.0	37.0	25.0	38.5	24.0	40.0	23.0
400DA	31.0	31.0	400SR	44.0	32.4	45.0	31.0	47.0	30.6	49.0	29.2	50.0	27.8	52.0	26.4	54.0	25.0

Testing condition: Without load at 5Bar; Namur S.V. ALV510F3C0 (CV=1.1) for size of 40 to 240 and Namur S.V. ALV410F1/F2C0 (CV=2.78) for size of 270 to 400.

