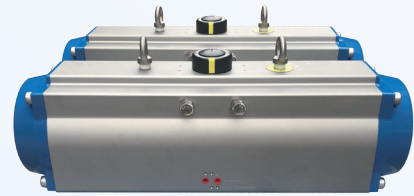




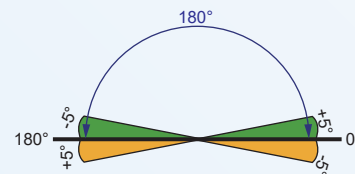
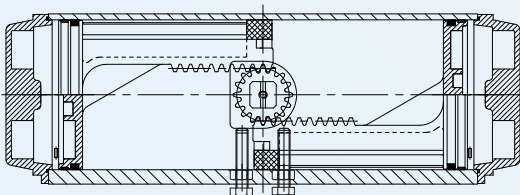
Specific Pneumatic Actuators

We have been producing the ACHEM C series specific pneumatic actuators for more than 20 years. There are two kinds of special type of actuator made by us, one is large stroke actuator, the other is three-position actuator. These actuators can meet the special requirements of various valves and automatic rotary devices. The three-position actuator can not only provide perfect control scheme for three-way or four-way valve, but also effectively solve the problem of water hammer in industrial pipeline.

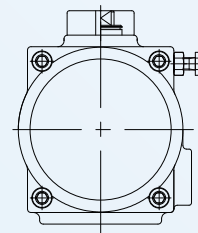
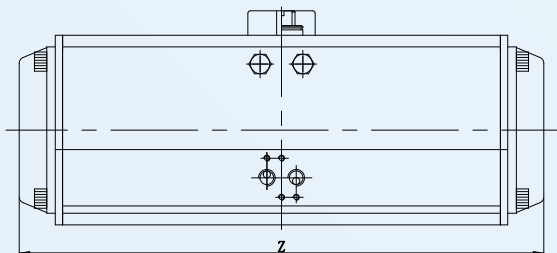


1. Large stroke actuator

1.1 An actuator with a rotation stroke of more than 120° is called a large stroke actuator. Based on our standard stroke (90°) actuator, as long as we are equipped with large stroke pistons and body and specially designed cam, the actuator will be able to perform the work of a large stroke. This stroke can be determined according to the needs of the customer, such as 120°, 130°, 180°, 240° and so on.



1.2 The size of the large stroke actuator is the same as that of the standard actuator, except for the length which are shown in tabel below.

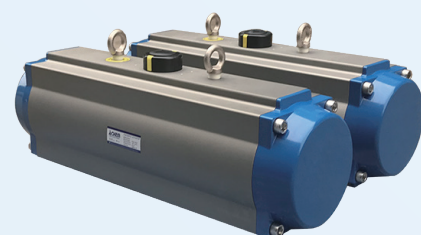
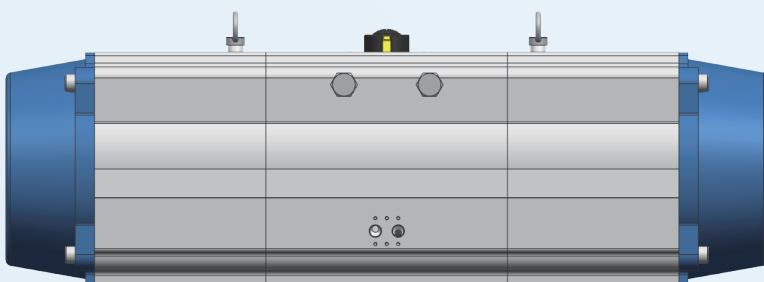


Unit:mm

Model	C52-180DA	C63-180DA	C75-180DA	C83-180DA	C92-180DA	C105-180DA	C125-180DA	C140-180DA
Z	211	243	258	304	362	394	429	583
Model	C160-180DA	C190-180DA	C210-180DA	C240-180DA	C270-180DA	C300-180DA	C350-180DA	C400-180DA
Z	666	764	768	889	1066	1194	1335	1430

Note that the top of the large stroke actuator at C125 and above size is equipped with two mounting rings.

1.3 The output torque is the same as that of the standard actuator of 90°. Note that our C series large stroke actuator is only available for double acting now.



* For continuous improvement of the product, we reserve the right to alter the dimensions, technical data in this catalogue.



2. Three-position pneumatic actuator

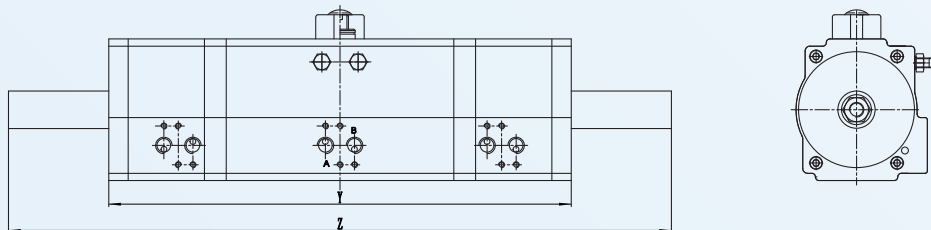
The three-position actuator is mainly used for the process control of three-way or four way valve or other three-position rotating device. We can provide two types of three-position pneumatic actuators. one is 90° three-position actuator of double acting and spring return which can perform stroke operation in three positions within the range of 90°, such as 0°, midway(MD) and 90°, MD = (20°, 80°), and the other one is 180° three-position actuator of double acting and spring return which can perform stroke operation in three positions within the range of 180°, such as 0°, midway and 180°, MD = (90°, 170°). However as for spring return actuator, MD=90°.

2.1 Dimensions of three-position pneumatic actuator

Most of the dimension of the three position actuator is the same as that of the standard actuator, except for the length which are shown in tabel below.



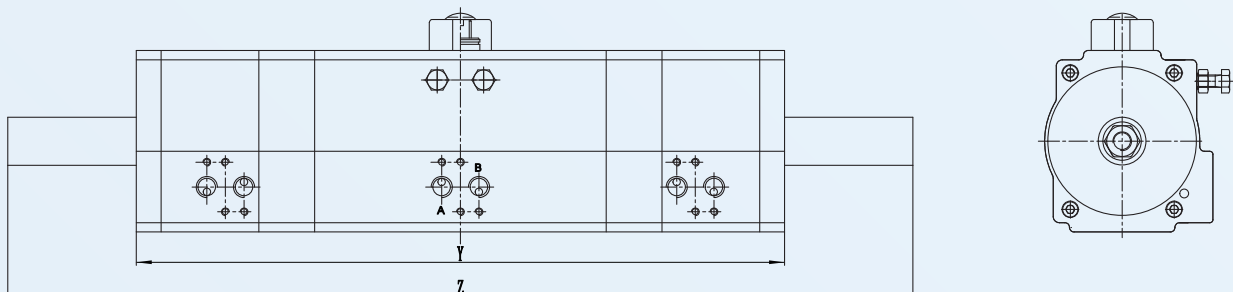
2.1.1 Three-position actuator of 90° with double acting (DA)



Unit:mm

Model	C52T90DA	C63T90DA	C75T90DA	C83T90DA	C92T90DA	C105T90DA	C125T90DA	C140T90DA
Y	260	300	302	339	382	400	450	548
Z	360	425	434	493	548	600	650	780
Model	C160T90DA	C190T90DA	C210T90DA	C240T90DA	C270T90DA	C300T90DA	C350T90DA	C400T90DA
Y	640	780	780	837	1011	1060	1243	1291
Z	910	1100	1100	1256	1516	1590	1865	1936

2.1.2 Three-position actuator of 90° with spring return (SR)



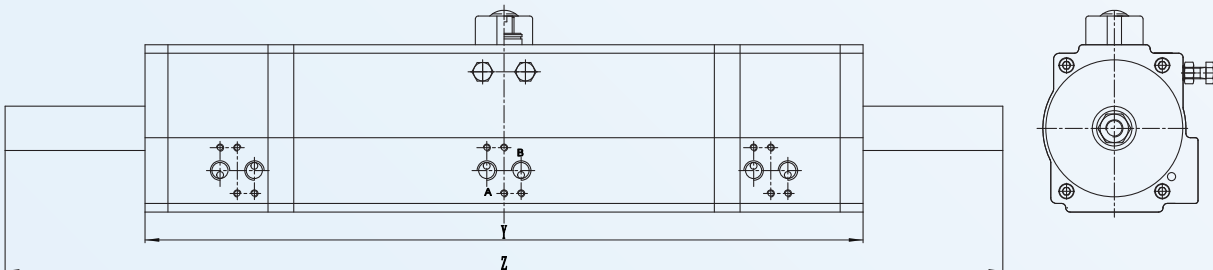
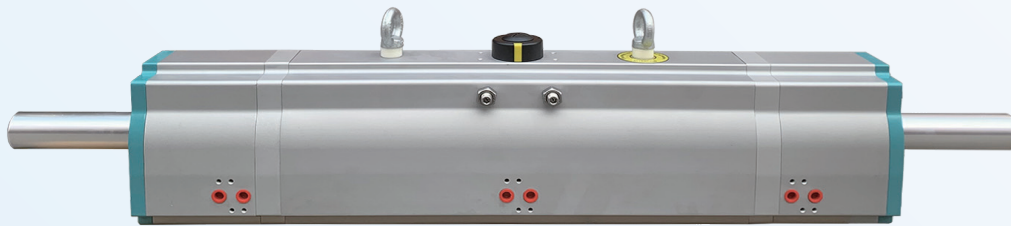
Unit:mm

Model	C52T90SR	C63T90SR	C75T90SR	C83T90SR	C92T90SR	C105T90SR	C125T90SR	C140T90SR
Y	267	308	326	359	418	446	488	617
Z	365	431	458	513	584	636	688	847
Model	C160T90SR	C190T90SR	C210T90SR	C240T90SR	C270T90SR	C300T90SR	C350T90SR	C400T90SR
Y	713	860	861	981	1184	1241	1456	1512
Z	972	1178	1179	1346	1625	1703	1998	2075



Specificical Pneumatic Actuators

2.1.3 Three-position actuator of 180° with double acting (DA)



Unit:mm

Model	C52T180DA	C63T180DA	C75T180DA	C83T180DA	C92T180DA	C105T180DA	C125T180DA	C140T180DA
Y	328	382	391	451	502	527	589	773
Z	548	538	541	621	698	729	815	1064
Model	C160T180DA	C190T180DA	C210T180DA	C240T180DA	C270T180DA	C300T180DA	C350T180DA	C400T180DA
Y	879	1018	1028	1166	1408	1476	1732	1798
Z	1218	1409	1423	1615	1949	2044	2398	2489

2.1.4 Three-position actuator of 180° with spring return (SR)

The three-position spring return actuator of 180° is a customer-ordered manufacturing product, its model has C-40T-180SR, C-52T-180SR, C-63T-180SR, C-75T-180SR, C-83T-180SR, C-92T-180SR, C-105T-180SR, C-125T-180SR, C-140T-180SR, C-160T-180SR, C-190T-180SR, C-210T-180SR, C-240T-180SR, C-270T-180SR, C-300T-180SR, C-350T-180SR, C-400T-180SR. The output torque of the actuator is the same as that for the standard actuator of 90°. The following figure shows the external dimensions of the C-300T-180SR. For the dimension drawing of other models, please contact the sales manager (info@alpha-achem.com).

