

# 3C

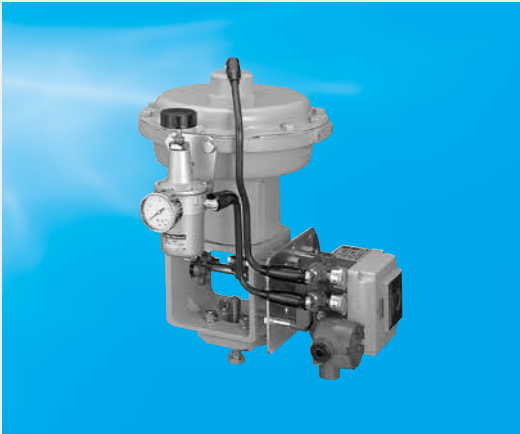
The 3C actuator is a vertical cylinder suitable for installations where space is limited. The piston rotates while moving vertically which causes the output shaft to rotate at the same time to open and close the valve. Air control devices such as limit switches and solenoid valves, and manual devices can be installed.



3C Specifications							
	AT5-80	AT5-100	AT5-120	AT5-150	AT5-180	AT5-220	AT5-250
Torque (N·m) (when 0.4MPa)	52	125	180	350	580	1320	1650
Supply pressure (MPa)	0.4 to 0.7						
Body shell max (MPa)	1.0						
Port size	Rc1/4			Rc3/8		Rc1/2	
Rotating angle	90°						
Operating fluid	Dry air						
Working temperature range (degrees)	−15 to 80						
Rotating speed range	5 to 15 secs.						10 to 20 secs.
Weight (kg)	3.3	5.5	8.7	15.4	28.0	47.0	70.0
Painting	Epoxy primer finish (Munsell N7)						

# Diaphragm

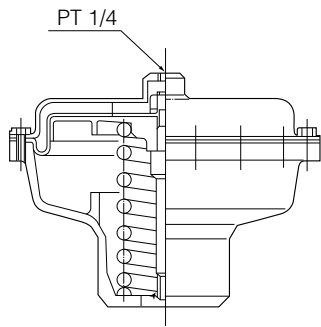
This type of actuator is used exclusively for rotary valves. The edge of the diaphragm is free, and by attaching a ring, the linear motion of the actuator is converted to a smooth rotational motion in the valve stem. Model 280 is a multiple spring type with four or six small internal springs, while Model 400 is a single spring type with one large spring. Both models are actuators that feature friction-free operation, excellent efficiency, and high output.



Diaphragm Specifications		
Type	280	400
Structure	Floating system	
Diaphragm area (cm <sup>2</sup> )	350	725
Max. supply pressure (KPa)	270	
Spring range (KPa)	60 to 220 (SUP.270)	60 to 190 (SUP.270)
Max. stroke (mm)	39.6	58.3
Applicable valve size (kg)	28.0 (Without top handle) (including bracket)	57.1 (Without top handle) (including bracket)

Remark: For both types 280 and 400, the manual handle (top handle) is available as an option.

## Diaphragm Operation principle



This type is exclusively used for rotary valves. The nose of the diaphragm is free, and by attaching a ring, linear motion of the actuator is smoothly converted to rotational motion of the valve stem. Type 280 is composed of four or six small springs, while Type 400 is a single spring type with one large spring. Both models feature friction-free operation, excellent efficiency, and high output.