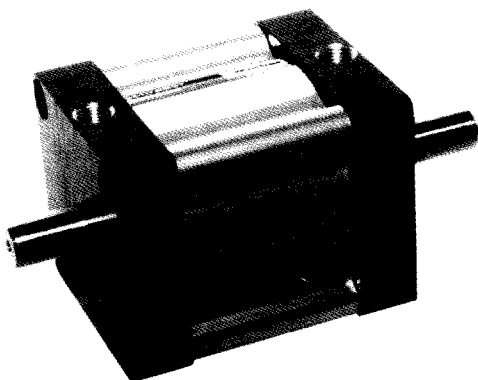


# Rotary actuators - vane type

## How do vane rotary actuators work



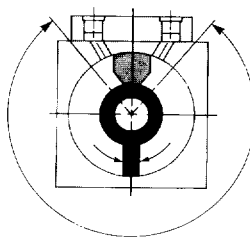
Vane actuators provide the maximum amount of output torque from the smallest possible envelope size. They convert pneumatic pressure into rotary motion for a wide variety of industrial applications.

A short cylindrical chamber encloses a vane attached to a central shaft. Air pressure is applied to one side of the vane. The opposite side of the vane is connected to exhaust. This produces rotation of the vane and thus the central shaft. Due to vane actuator design there will always be some internal bypass in these units and therefore they should not be used as a brake or to support loads.

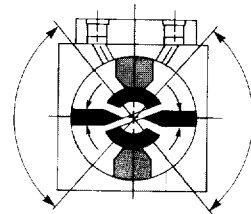
Two basic styles are available. Single vane models have a maximum rotation of 280°, while the double vane units produce twice the torque output from identical envelope dimensions and have a maximum rotation of 100°.

## Technical information

Type		Double acting actuator
Standard rotation (tolerance $\pm 1^\circ$ )	Single vane	0 to 275°, size 10 to 11
		0 to 280°, size 22 to 23
	Double vane	0 to 95°, size 10 to 11
		0 to 100°, size 22 to 33
Temperature		-10°C to + 80°C
Air supply		Lubricated or non-lubricated
Pressure range		2 to 10 bar max



Single vane  
280° rotation



Double vane  
100° rotation

## Materials:

End caps	: Hard anodised aluminium
Tubing	: Hard anodised aluminium smooth profile
Shaft	: Stainless steel
Bearing	: PTFE coated bearing
Vane	: Hard anodised aluminium extrusion
Seals	: Nitrile

## Through Rod facility size 22 and 33

The two larger sizes of Vane Actuators are through rod as standard. The through rod facility enables linkages to be connected to both ends of the unit, maximising the design flexibility.

This also enables the unit to be equipped with a kit providing full adjustment of the angle of rotation. The kit can be supplied complete with or without inductive sensors.

These options can be assembled when ordering the actuator or can be added later, see page AK5.

# Rotary actuators - vane type

## How to order

### Part nos basic units

Size	Part no.	Max. rotation	Type	Shaft
10	6V5100010F-275	275°	Single	Not Through rod
	6V5100010F-095	95°	Double	
11	6V5200010F-275	275°	Single	
	6V5200010F-095	95°	Double	
22	6V1300030F-280	280°	Single	Through rod
	6V1300030F-100	100°	Double	
33	6V2400030F-280	280°	Single	
	6V2400030F-100	100°	Double	

### Part nos. complete with angle adjustment and sensors

Size	Part no.	Max. rotation	Type	Options
22	6V1357630F-220	220°	Single	Angle adjustment kit
	6V1357730F-100	100°	Double	
	6V1357635F-220	220°	Single	As above + PNP Sensors + plug
	6V1357735F-100	100°	Double	
	6V1357636F-220	220°	Single	As above + NPN Sensors + plug
	6V1357736F-100	100°	Double	
33	6V2457630F-220	220°	Single	Angle adjustment kit
	6V2457730F-100	100°	Double	
	6V2457635F-220	220°	Single	As above + PNP Sensor + plug
	6V2457735F-100	100°	Double	
	6V2457636F-220	220°	Single	As above + NPN Sensor + plug
	6V2457736F-100	100°	Double	

### Part nos. angle adjustment and sensor kits

Size	Part no.	Options
22	6V03570	Angle adjustment kit
	6V03575	Angle adjustment kit with sensors PNP
	6V03576	Angle adjustment kit with sensors NPN
33	6V04570	Angle adjustment kit
	6V04575	Angle adjustment kit with sensors PNP
	6V04576	Angle adjustment kit with sensors NPN