



# FLIP-POD™ Vacuum System

# Alu FLIP-POD FLIP-POD

#### This technology is ideal for

- Milling
- Grinding
- Drilling
- Cutting threads

Mainly for large workpieces made out of

- Wood
- Plastic
- Glass
- Cast metals

#### Suitable for

■ Milled or rough surfaces.

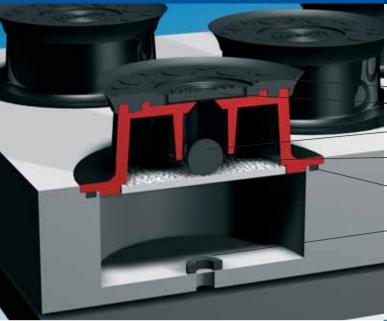
### **Advantages**

- Strong hold down forces enable the use of large machines.
- Bevels, contours and radii can be performed on the upper and lower workpiece surfaces.
- Clamping dimensions can be changed within seconds to conform to new workpiece sizes
- Can be used on most machine tables.

#### Handling

- Pods are the contact surfaces fort the workpiece
- Simply activate or deactivate the pods by turning them around.
- To clamp a workpiece effectively 6-8 pods are required.
- This modular system can be extended for larger clamping surfaces.





The crossection shows

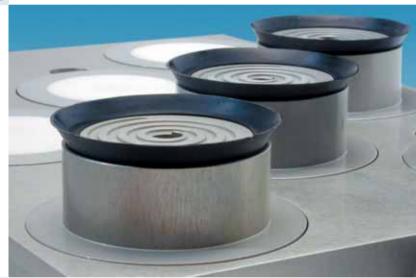
- FP Sucker
- -■ FP Unit
- ■ FP Polymer ball
- and
- FP Filter

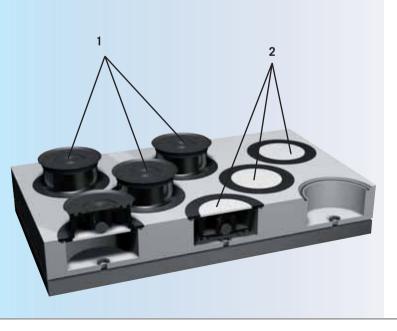
In the pod plate you will find

- FP Large gasket
- ■ FP Center hole gasket

#### Alu FLIP-POD™

has an accurate, defined workpiece surface. Height tolerance is only  $50\mu$ . They are suitable for face machining on both surfaces, especially of metallic workpieces.





#### Function

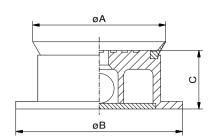
The round polymer pods (1) protrude out of the pod plate when in use.

The pods not required lie in a recess cavity (2) of the pod plate.

Simply flipping them over activates or deactivates the pods. The valve ball which stops the vacuum supply when the pod is resting, opens the valve and the vacuum system is activated.

All active pods stand 27mm above the pod plate surface, allowing contour milling and recess cutting on the outer contours.





## Supply includes:

- FP Seal
- FP Ball
- FP Filter

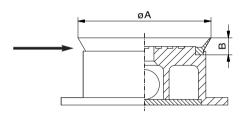
# FP Basic unit

complete

| Nr.   | A  | В  | C  | Mat       | g   |
|-------|----|----|----|-----------|-----|
| 84408 | 70 | 88 | 31 | Aluminium | 170 |
| 14384 | 70 | 88 | 31 | Polymer   | 100 |



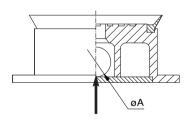




## **FP Seal**

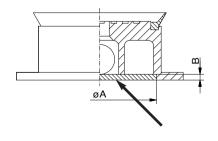
for Alu-Pod

| Nr.   | Α  | В | g  | ğ |
|-------|----|---|----|---|
| 30584 | 70 | 9 |    | 6 |
|       |    |   | 70 |   |



# **FP Polymer Ball**

| Nr.   | Α    |  | ğ  |
|-------|------|--|----|
| 12124 | 15,8 |  | 10 |
|       |      |  |    |



## **FP Filter**

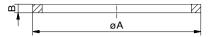
| Nr.   | A  | В | ğ  |
|-------|----|---|----|
| 12125 | 61 | 3 | 14 |
|       |    |   |    |
|       |    |   | )  |



# FP Large seal

for Pod Plate





# FP Center hole gasket for pod cavity

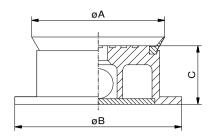
| Nr.   | Α  | В | g |
|-------|----|---|---|
| 11394 | 28 | 6 | 1 |











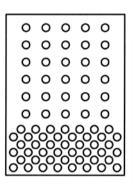
## **FLIP-POD™** Sets

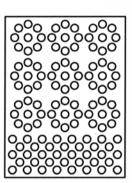
polymer version

| Nr.   | Description       | Area/Grid              | Pods (N) | kg   |
|-------|-------------------|------------------------|----------|------|
| 83100 | FLIP-POD™ Set 100 | 1m <sup>2</sup> /100mm | 100      | 10,2 |
| 83200 | FLIP-POD™ Set 200 | 2m <sup>2</sup> /100mm | 200      | 20,2 |
| 83300 | FLIP-POD™ Set 300 | 3m <sup>2</sup> /100mm | 300      | 30,2 |
| 83400 | FLIP-POD™ Set 400 | 4m <sup>2</sup> /100mm | 400      | 40,2 |

The sketches show a range of possible pod panel designs.

| 0 | 00 | 00 | 000 |
|---|----|----|-----|
| 0 | 00 | 00 | 000 |
| 0 | 00 | 00 | 000 |
| 0 | 00 | 00 | 000 |
| 0 | 00 | 00 | 000 |
| 0 | 00 | 00 | 000 |
| 0 | 00 | 00 | 000 |
| 0 | 00 | 00 | 000 |
| 0 | 00 | 00 | 000 |
| 0 | 00 | 00 | 000 |
| 0 | 00 | 00 | 000 |
|   |    |    |     |





The user can choose a panel design that best suits the parts being machined. The pod panel can be laid out in almost any design and combination.

## Supply includes:

- Basic unit with lip seal
- FP Center hole gasket
- FP Large seal
- 3 Retractable locator pod
- 2 Fixed locator pods





# FP Lift ring

1/2"

| Nr.   | Α    | В    | ğ  |
|-------|------|------|----|
| 11396 | 88,5 | 12,7 | 65 |

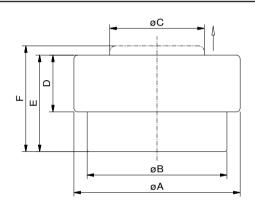




# **FP Transfer Pod**

| Nr.   | A    | В   | C    | Dg | E  | F    | ğ   |
|-------|------|-----|------|----|----|------|-----|
| 85662 | 88.9 | 874 | 50.8 | 30 | 51 | 55.9 | 230 |



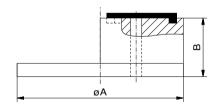


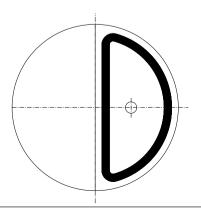
Acts as spacer when positioning large workpieces, raised ring retracts when vacuum is applied

# FP Half Pod (1/2)

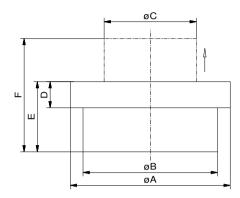
| Nr.   | A  | В    | B Mat     |     |
|-------|----|------|-----------|-----|
| 85328 | 88 | 30,9 | Aluminium | 150 |
| 82138 | 88 | 30,9 | Polymer   | 95  |











## FP Retractable locator pod

automatically retract when vacuum is applied

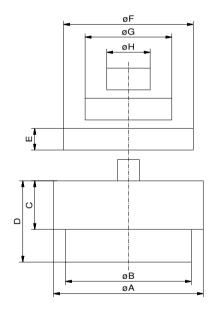
| Nr.   | A    | В  | C    | D    | E    | F    | ğ   |
|-------|------|----|------|------|------|------|-----|
| 82136 | 88.9 | 74 | 50,8 | 14,4 | 38,6 | 62,3 | 252 |







Retract function of upper section when vacuum switched on



# FP Fixed locator pod

incl. unit, pins and spacer disks



#### Fixed and retractable locator pods

ensure high accuracy. Locator pods are available in both fixed and retractable versions, either of which fit in any pod cavity. After positioning the workpiece the retractable pods are drawn back into the pod plate as soon as vacuum is switched on, allowing a free path for the cutting tool.

